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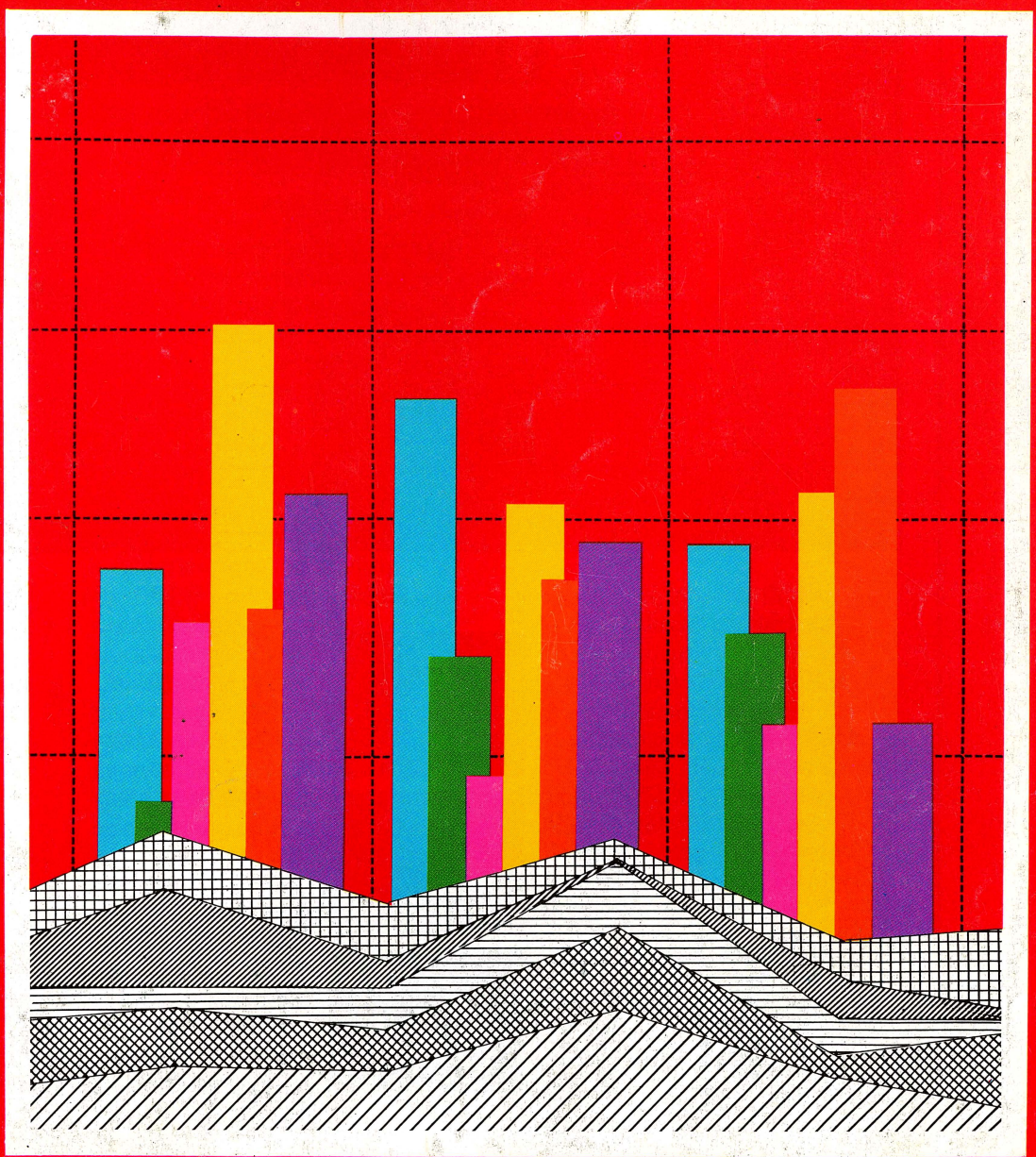
EPSON CONNECTION

Devoted to Epson Desktop and Portable Computer Users
SEPTEMBER 1985

Spreadsheets



SPREADSHEETS
Valdocs 2
Multiplan
PeachCalc

FRIDAY!

MSCRIPT

DATA SECURITY
With CodeStar

TRAVELER'S PAK

Epson announces the last thing you'd expect in a personal computer.

Permanence.

Introducing the Epson® QX-16.™ The computer that flies in the face of obsolescence. The computer you can look forward to productively using for years and years. Possibly your entire career.

No more worrying about software that won't work with hardware. Or technological advances that leave you behind. Or outgrowing a computer you've hardly used.

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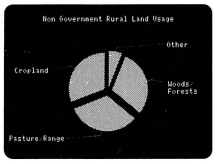

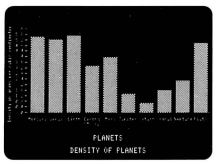

Valdocs® 2 is one reason. This unique, integrated software package from Epson, worth about $495.00, comes free with the QX-16. It includes a fast, easy-to-use word processing system. An excellent spreadsheet with integrated graphics. Complete electronic mail capability. A convenient calendar/scheduler. And more.

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- *3 expansion slots*
- *MS-DOS 2.11 plus CP/M-80 B2.26 operating systems*
- *GW-Basic*
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SuperCalc 3.® And you can also run almost anything written for the IBM PC, along with the thousands of CP/M programs the PC can't touch.

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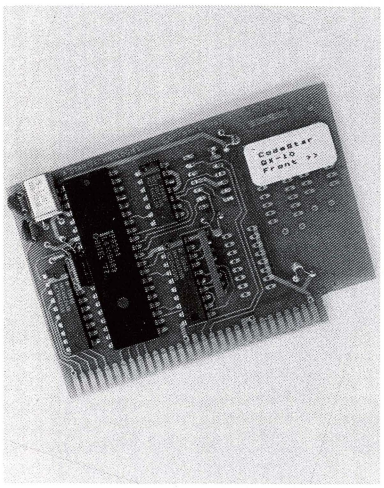
QX-16

EPSONCONNECTION

SEPTEMBER VOLUME 3 NO. 8

FEATURES



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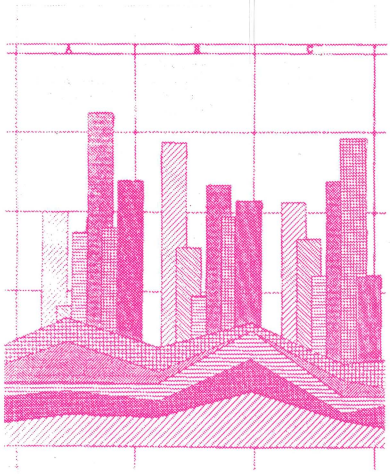

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Editorial

We are now celebrating the beginning of our third year in print. In planning for this next year, we studied the reader survey card results which 15% of you returned. We are continuing our commitment to be a dynamic resource for Epson computer users. We will be initiating the new "USERS Column" this month dedicated to, and written by Epson users. We request that you send in your Users Tips, they may even have been published in your user group newsletters, or published on the CompuServe Epsonline service.

Another column we are adding relates to users of the EpsonNet Bulletin Boards, and specifically to our own EpsonConnection SOCIS (Subscriber Only Computer Information Service) BBS. In the "EpConn UpNotes" column we will be reviewing and rating the public domain software available, and explaining how to use your modem to call a BBS and retrieve this free software.

This month we are focusing on spreadsheets, and begin to look at the Valdocs 2 spreadsheet. There are so many features and tips about Valdocs, that it will take more than one or two articles to cover it thoroughly. The Epson "Valdocs 2, QX-10 Upgrade Summary", which came with V2 should be read, especially if you run into a problem. Problems can be prevented by reading the summary, accessing the HELP files, and reading the menu screens carefully. We have included two different methods of retrieving a spreadsheet into the editor; sent in by Charlie Beeman and Dan Oja. The method used by Reverend Beeman involves going into Zapple, which we feel beginners should avoid.

Bug reports are flooding the BBS and phone lines. Epson America will be sending out technical notes to Users Groups, and we will include pertinent information from their notes for those without access to a group.

Geneva users take note of the review of Traveler's Pak, it is a nice system for business use. We also just received the dBTraveler and dBase for the PX, you can look for notes from Bob Hermann on these next month.

If your Users Group does not receive a free copy of our magazine, please notify us to add you to the list. Also, check with your dealer, and have him send in a business card to be placed on the dealer list.

The Wall Street Journal (July 10,) announced a forth coming venture with Epson America and ABC. I attended a demonstration at the July National Computer Convention and was impressed with the potential of this new venture. Epson America Inc., American Broadcasting Video Enterprises a division of American Broadcasting Companies, the Hillman Co. a venture capital firm, and the Indesys (Information Management Systems) Management Group have formed a partnership. Charter Clients of this new service are Avon, Businessland, Peat Marwick Mitchell and Company, and Telerate Corporation. This partnership will provide a new concept in data transmission that utilizes radio, satellite, and personal computer equipment. The QX-16 (IBM-PC compatible computers) or your Epson printer can be equipped with a low-cost (approx. $250) internal receiver card. This card will receive data transmitted by a local ABC FM radio station. Five cities will be on-line this fall (October projection); New York, Chicago, Los Angeles, San Francisco, and Dallas. For example, if you live in New York, you could use your modem to call the local INDESYS number with a letter to be sent to LA, they will beam this via satellite at 38.4K Baud (equivalent to 1.5 pages per second) to an ABC station in LA, which in turn will transmit to a receiver at another printer or computer via FM frequency signals. The costs involved are for the initial card or equipment and a per page charge, there is no service fee or monthly use fee. Guaranteed one hour delivery (MAXMAIL) will cost $0.20 per page, same day delivery within four hours (DIGITEXT) $0.15 per page, and overnight by 8 am delivery (NITETEXT) $0.10 per page. Communications to their system can be from synchronous, or asynchronous, personal or main frame computer. Your computer or printer need not be turned on, a buffer can catch the transmission, and you will know a message is awaiting by a red indicator light. Looking at comparative prices of MCI MAIL, Easy Link (Western Union), Federal Express, FAX, and BONNEVILLE show the cost of this new system to be significantly less expensive after the initial hardware purchase. Whether it will work with the QXPC and the QX-10 was not indicated.

Rising Star Industries is releasing three new products which are introduced in the New Products this month.

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$395 Set of Four
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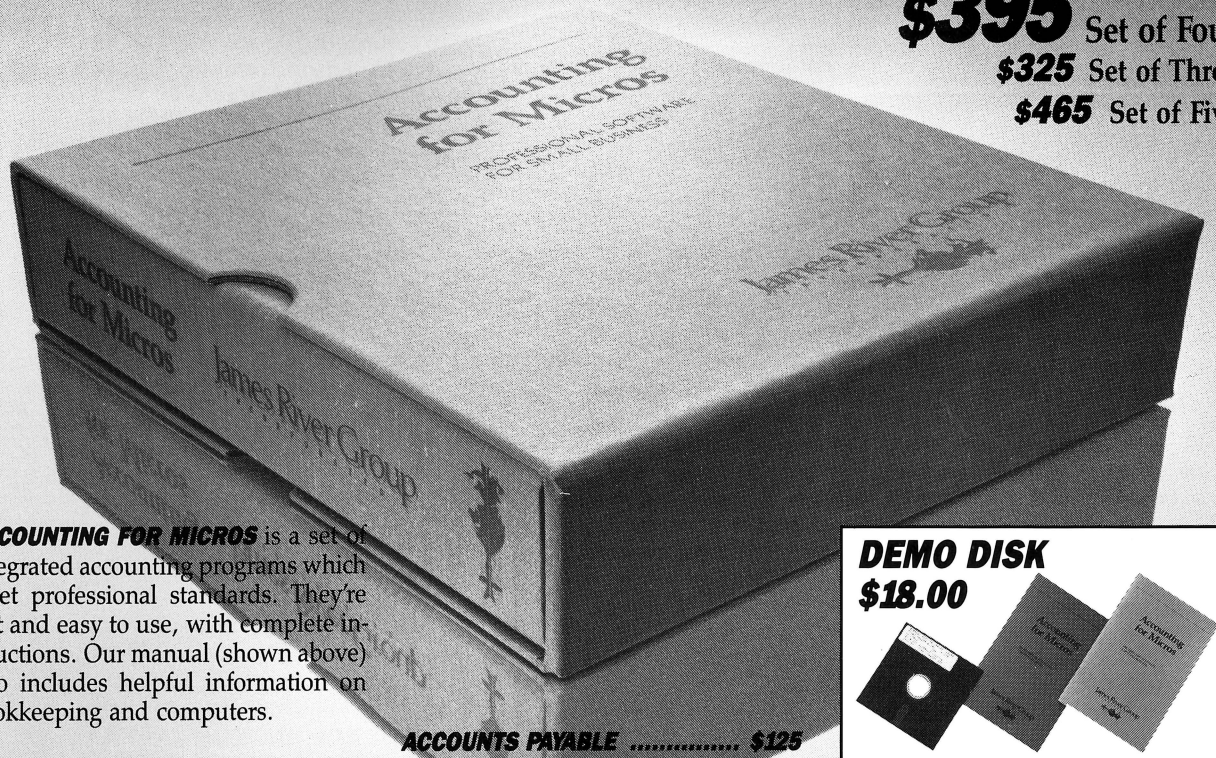

ACCOUNTING FOR MICROS is a set of integrated accounting programs which meet professional standards. They're fast and easy to use, with complete instructions. Our manual (shown above) also includes helpful information on bookkeeping and computers.

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INVENTORY $125
Allows up to 4,000 parts. Keeps 3 month history of unit sales as well as year to date. With AR, can be used as point of sale system (prints invoices, handles cash). Reports include Inventory Value and Stock Report, Internal and Customer Price List.

ACCOUNTS PAYABLE $125
Allows up to 500 vendors and 600 invoices/mo. Records invoices and handwritten checks. Prints computer checks on any pre-printed form. Keeps vendor names and addresses.

PAYROLL $125
Will handle up to 100 employees with six deductions per employee. Deductions may be determined as fixed dollar amounts or percentages, or referred to a table for automatic look-up. Tax tables are easily entered, or purchased separately.

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Questions & Answers

Q I have a QX-10 with an MX-80 printer and intend to take them with me when I move to Italy in a few months. I notice on the rear plate that both are rated for 50-60Hz, 120v operation. If I use a transformer to step down the Italian 220v, 50Hz power to 110-120v, will my equipment work properly, and if so would it be risky for my computer? Also, can you give me any suggestions on safeguarding my disks while in transit? If I carry them with me will X-ray machines affect them?

Mike Cissell
Burke, VA

A *Mike, unless you intend to keep your computer equipment in Europe permanently, a reliable transformer should perform adequately. If your QX-10 is going to stay in Europe, then see your dealer about installing the proper power supply boards in your equipment. To prevent accidental floppy disk erasure, wrap your disks in aluminum foil. This should retard most of the exposure your disks may receive from X-ray machines.*

Q Can May's Disk-of-the-Month (EC-10) utility program, ZCPR1, be used with CP/M version B2.20? Titan's QXPC2 board said that it needed CP/M version 2.25 to operate, but I found out that it wasn't necessary unless I had a hard disk. Is this the case with ZCPR1? And, is it possible to transfer files from MS-DOS to CP/M or TPM, or even vice-versa?

Is it really necessary to change Peachtext's operating system from A2.20 to B2.20? The operating system on B2.20 doesn't fit with the normal transfer. The "READ.ME" file explains how to install it, but is it worth it? Are there any advantages to updating Peachtext with the newer operating system other than the obvious one of having a more friendly operating system?

Stan A. Shelton
San Diego, CA

A *The ZCPR on May's Disk-of-the-Month is specially configured for CP/M B2.25. It can be configured for B2.20, but a knowledge of assembly language programming would be required to do this.*

Yes, you can transfer data files from CP/M or TPM to MS-DOS and vice-versa with a program called UNIFORM (Universal Formatter). UNIFORM is available from:

Micro Solutions
125 S. Fourth Streets
DeKalb, IL 60115

There should be no reason to transfer your Peachtext to B2.20 (or later versions) if your software is functioning properly and if you are satisfied with the very old CP/M A2.2 operating system.

Q In the question and answer section of your magazine (EC May '85), your answer to Mark Donahoe about the 512k space prompts another question. If I were to add a QX-PC2 card, with additional 256k, could I then run CP/M programs that were set up for a 16 bit processor (8088)? Or is this 16 bit only for MS-DOS?

Also in the May question and answers section, I call your attention to Jim College's question about the disk directories. Would not the directories you have in the March "CP/M Begins" on printing out a directory be the correct answer to at least some of his question?

Warren Jackson
Minneapolis, MN

A *There is no such thing as a "CP/M program set up for a 16-bit processor". Although many CP/M programs are converted to MS-DOS, I know of no program that can run in both the 8 and 16 bit environment without modifications (although some high-level languages may be compatible). You answered your own question; 16 bit is for MS-DOS only.*

The question Jim College asked was how to manipulate the directory information from within an MBASIC program. I repeat that the only solution would be to create a machine language subroutine that stores the directory into variables that MBASIC can access, and CALL this routine from your MBASIC program. Perhaps the SD.COM source code can provide this routine.

Q Can you tell me if version 3 of ZCPR contains sufficiently more features than the version in EC-10 and if it does where can I obtain it?

Charles L. Brooks
Phoenix, AZ

A *Yes, version 3 contains many more features. These features are not necessarily "built-in" as they are in version 1, but rather are "transient commands" such as PIP and STAT are within the typical CP/M environment. If you operate a hard drive, then implementation of ZCPR3 may be beneficial, otherwise we could not recommend it unless you are an avid hobbiest. We are scheduled to review ZCPR3 and/or the Z Operating System in our Feb. 1986 issue. For more information concerning ZCPR3, contact:*

Echelon Software
101 First Street
Suite 427
Los Altos, CA 94022

Q I own a Yamaha DX7 digital synthesizer which I use in church, personal performance, and recording. I also use various other synthesizers in studio work. There are numerous computer programs and support systems available for the DX7 and other synthesizers based on Apple, Commodore, and IBM. These programs include program and voice retrieval, voice edit capability, and sequencing. All of these programs are managed through the keyboard

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industry's standard MIDI interface. I have been unable to locate any support for the QX-10. Do you know of anything like this?

Rev. Randall Creath
Sheffield, IA

A *We know of nothing that will connect your existing synthesizers to the QX-10, however, there is a speech and sound synthesizer available for the QX-10 called the QXSM-1. It costs $319.00 and is available from:*

Universal Computer Products
P.O. Box 4229
Irvine, CA 92716
714-786-3244

Q I am having trouble de-librarying the EpsonConnection Disk of the Month #2. Anything that would help would be appreciated.

E. W. Richards
Naples, FL

A *You are not alone; many readers have called with similar problems. The most common problem with de-librarying library files is that the disk runs out of disk space. Make sure that the diskette you are extracting the member files onto has enough space left to accomodate the new files. Since many of our EC disks contain library (.LBR) files, any attempt to extract members on the same disk will result in a write error from the DE-LBR program (or LU3 or NULU). This write error means that the disk is full. When member files are extracted from .LBR files, the LBR file is not altered in any way. It's size and contents always remain the same. What happens is that copies of the files "inside" the library are extracted (pulled out) and placed on the disk individually, and when files are extracted, they are obviously going to take up some drive space. The solution is to extract the files onto a blank disk. This is done by logging onto the drive which contains the blank disk, then invoking DE-LBR from the blank drive. For example, if you have ZCPR.LBR on drive A: and you wish to extract its members onto the blank diskette in drive B:. Simply log into the B: drive and enter "A:DE-LBR A:ZCPR". The above syntax will call the DE-LBR file on drive A:, and the DE-LBR will call the ZCPR library on drive A, and it will extract the member files onto drive B, since it is the default drive (the drive where you entered the command).* ■

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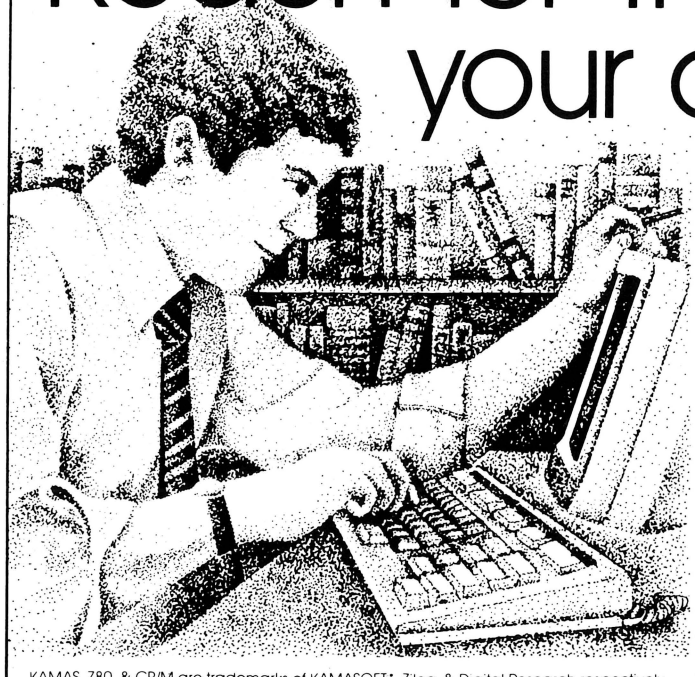

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CITY _____ STATE _____ ZIP _____

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  Telephone Number (___) _____
- ☐ Please have your nearest dealer contact me.

NAME _____ TITLE _____
COMPANY NAME _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____

PLACE
STAMP
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Name and Address
of Manufacturer

PLACE
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Letters to the Editor

Home Accountant

Dear Carolyn,

It's been almost a month since I read your May issue, but something has been bothering me that I felt I should write about.

The May issue contained an excellent article comparing Mini-Ledger and The Home Accountant. Larry Hufty's method of using a point system to measure one against the other provides a clear and easy to understand comparison. I agree with Larry's review and his conclusions, however I must take exception to one statement he made, and what it implies.

In the section titled SPEED, Larry starts by saying, "The Home Accountant is written in MBASIC and is inherently slow." Unfortunately Home Accountant has been giving MBASIC a bad reputation as far as speed goes. Larry is correct, MBASIC is slower than compiled programs and looks like a turtle compared to assembly, however, programs written in MBASIC are not necessarily slow.

Our perception of speed in software is based on what we see happening on the screen. If program operation or changing program modules causes us to wait for a "long" time, we label the program as slow. However, speed in a programming language generally refers to how fast the language is at number crunching. MBASIC is a slow number cruncher, but Home Accountant software does not require heavy duty number crunching. For a program of this type it is the program structure, the amount of disk access required, and the ergonomics, (how it interfaces with people) that limits the speed. These factors can slow or speed up the operation of a program regardless of what language it is written in.

As the author of another home accounting program written in MBASIC (Home Money Manager), I felt I should test my program against the speed standards set by Larry in his article. If what I say is true, The Home Money Manager should be able to keep up with Mini-Ledger.

Taking the last ten checks my wife wrote, I was able to enter them in the check register and my budget in 3 minutes and 18 seconds. This compares to the time achieved by Mini-Ledger, which was 3 minutes and 24 seconds. Thus, MBASIC is not to blame for the slowness of some programs. If anything, blame it on the programmers, not the language.

Steve Hudgik
Owner, Nickelodeon Software
Tualatin, OR

Thanks Allen

Dear Editor,

We want to say a word of thanks about the Disk of the Month to Allen Howell. The READ.ME files are so important and well done. Every once in a while, a .DOC file seems to have gotten lost like STARTHLP.DOC for the Star Trek game on EC-4. Another one that could use some documentation is ELIZA. There must be something in there occupying 20K on EC-5.

We won't complain that the May EC has not come yet. A newsletter from Australia dated July 1984 did just arrive! That's life in the tropics. May we live to use 2.0.

Arnold Wetzel
Charlotte Amalie, Virgin Islands

Cheap Disk Tip

Dear Editor,

Here is a "tip" that might be worth passing along to your readers. Possibly it is either self-evident, or has been said a thousand times, and I've just missed it. But in the event those are not so, it might be of value.

After my QX-10 was about three months old, it started getting "lazy" on booting Valdocs. It would hang up, sitting there and staring back at me, about half way through the boot, until I had given it some time to warm up. This warm-up requirement got longer and longer, over the period of about a month, until it was a full twenty five to thirty minutes. Obviously something was going wrong.

I finally unbolted everything and took the CPU to a dealer who sat on it for a week, and finally said they couldn't figure out anything. . . would I like to give it up for a few more weeks while they tried to fathom it out? No.

I brought it home, and it still acted the same. Wouldn't boot until it was good and ready.

I had it in my mind that there was a head problem on drive A:, but everyone said "LEAVE THE DRIVE ALONE!" for some reason, I started wondering about my discs. I had been using "El Cheapo Super Supremes." So I went out and bought a box of Verbatim DataLife floppies, and made a new back up system disk on one.

It works perfectly! I've been using that new disc for over a month now, and it boots cold the first time, every time! As a sort of control, I've retired both of the old El Cheapos now and then, and it still won't boot cold on either of them.

Wilson R. Stone
Glendora, CA

Ripped Off

Editor,

As a professional writer and a frustrated QX-10 owner, I have to totally agree with Lori Willis' letter, in your June-July issue, in which she says she feels ripped off.

I bought a package deal almost two years ago consisting of a QX-10, an RX-80 printer, Valdocs, and a trio of Peachtree programs, the only one of which I had any great use for being a spelling proofreader.

From the very beginning, I complained about the slow speed of Valdocs. No problem, I was assured, the final version, Valdocs 2 would be along in two months and it would be both faster and better.

I've limped along now for nearly two years awaiting the "faster, better" Valdocs 2. Oh, just wait a bit longer, I was told; the new program will be the cat's meow - it will do everything but brush my teeth for me. Then the great day arrives and my dealer calls me to tell me that I can come in and get a copy of Valdocs 2. Just bring five blank disks with me.

That I could have lived with; the one advantage of Valdocs being that it's easy to figure out, even without the documentation. Less easy to live with is Valdocs 2's incompatibility with the CP/M system. My Peachtree spellchecker wouldn't work with the new program, so I called the local Epson reps. Know what they told me? No spellchecker program works with Valdocs 2! But not to worry, they're looking at all the spellcheckers on the market right now, in hopes of finding one that could be made compatible. If a spellchecker was so important, the rep went on, there was a nice HASCI - enabled WordStar program available. Of course, I'd still have to buy another spellchecker program to run with it, but at least one was available.

I would not have believed it possible that programmers could work for over two years to "improve" a word processing program, and forget that checking your spelling is an important part of writing. They also have not yet learned that counting your words is helpful, although for years, most other word processing programs have included a word count function.

If Epson expects to be taken seriously by serious writers, they need to clean up their act and do so before it's too late. Indeed, it's too late now, as far as I'm concerned.

I'll probably be taking Epson rep's advice soon, and getting another word processing program. But I won't bother getting one that is HASCI-enabled, because I won't be running it on an Epson computer.

Regards
Stephen Morrill
Tampa, FL

Disk of the Month

EC-13 - MBASIC Programmers Utilities

By Allen Howell

Here are some really helpful utility programs that I have found on various BBS or public domain disks. All of these programs are utilities for CP/M MBASIC programmers, however, these programs should also work in MS-DOS GWBASIC with a few minor changes.

- **MBEAUT.BAS** is a program that will 'beautify' any MBASIC program. The program will indent FOR/NEXT loops, IF statements, program segments (like ON...GOTO, RETURN, and END statements), which results in a more 'structured' and readable program.
- **MBXREF.BAS** creates a cross-reference listing for MBASIC programs. The output will display the line numbers that all variables are referenced to, and display where the referenced line numbers are, for example GOSUB's, and GOTO's. A good debugging tool. See program listing.
- **MBREM.BAS** is a short program that removes all remark (REM and') statements from the MBASIC program.

BS/BMLP.LBR

BMLP is a macro language preprocessor. It allows you to write programs and use macros which you define, in the program or within macro library text files.

BSLP takes a source file containing special structured statements and translates it into a program containing BASIC statements.

Using these tools can help you write more concise and well structured BASIC programs. Take advantage of these features:

- Program with macros using parameters and subroutines that are maintained in libraries where they can be accessed by your other programs.
- Write free-form, indented statements without line numbers.
- Include statements from many separate files and libraries into a single BASIC program you can write and maintain your programs in small modules.
- Organize your subroutines into procedures, each with its own descriptive alpha-numeric name.
- Structure your programming with multi-line conditionals, loop and case constructs similar to those found in programming languages like C and Pascal.

When using these pre-processors, please bear in mind that these versions are written in BASIC and are provided for your use. You are free to modify them in any manner you see fit.

All of these programs are available on this month's Disk-of-the-Month. These public domain programs are provided on a quality diskette and the price does include downloading, postage and handling. **To order the Disk of the Month**, please send a check or money order for $15 to the EpsonConnection, Disk Service Department, P.O. Box 14027, Detroit, MI 48214, Please be sure to indicate the disk order number (EC-13) with your payment.

Disclaimer: All of the programs and documentation on this disk are known to be public domain and no warranties are expressed or implied. There are no guarantees with public domain software. All of the programs have been tested on the Epson QX-10, and are known to run. Public Domain programs are programs written by other users, for public use at little or no charge, other than that for handling, mailing and materials. **Note:** We imply no similarity, or advise any comparison, between public domain software and software that is commercially produced. A basic knowledge of CP/M is also recommended to utilize this software.

```
5 REM  MBXREF.BAS  MBASIC 5.2 [CP/M ver] Cross Refer
ence Utility
6 REM  Downloaded from Prodigy Systems CBBS  5/17/81
  T.E.M.
8 E$=CHR$(27):CLR$=E$+"E":PRINT CLR$
10 PRINT TAB(20);"MICROSOFT BASIC CROSS REFERENCE UT
ILITY."
20 PRINT:PRINT TAB(20);"LISTS ALL VARIABLES AND REFE
RENCED LINE #S."
23 PRINT:PRINT TAB(20);"MBASIC FILES MUST BE ASCII F
OR THIS PROGRAM."
26 PRINT:PRINT TAB(20);"ENTER ONE OR MORE FILE NAMES
, THEN JUST RETURN"
29 PRINT:PRINT TAB(20);"TO END THE LIST OF FILENAMES
."
32 PRINT:PRINT TAB(20);"   ---> BE SURE LINE PRINTER
 IS READY."
50 '
60 CLEAR 3000 :DEFINT I-J : LW=80 : WIDTH 132
70 ON ERROR GOTO 1480
80 DIM  RW$(126), PT%(25), F$(10)
90 I=450 : DIM  VNXT%(540), V$(540), FRST%(450), LST
%(450), RFL%(2250), NXT%(2250)
120 ' ...RESERVED WORDS - - - -
130 DATA ABS,AND,ASC,AS,ATN,AUTO,CDBL,CHR$,CINT,CLEA
R,CLOSE,CONSOLE,CONT
140 DATA COS,CSNG,CVD,CVI,CVS,DATA
150 DATA DEFDBL,DEFINT,DEFSNG,DEFSTR,DEFUSR,DEF,DELE
TE,DIM,DSKI$,DSKO$,DSKF
160 DATA EDIT,ELSE,END,EOF,EQV,ERASE,ERL,ERR,EXP,FIE
LD,FILES,FIX,FOR
170 DATA FRE,GET,GOSUB,GOTO,HEX$
180 DATA IF,IMP,INPUT,INP,INSTR,INT,KILL,LEFT$,LEN,L
ET,LINE
190 DATA LIST,LLIST,LOAD,LOC,LOF,LOG,LPRINT,LSET,MER
GE,MID$,MKD$,MKI$
200 DATA MKS$,MOD,MOUNT,NAME,NEW,NEXT,NOT,NULL,OCT$,
ON,OPEN,OR,OUT
210 DATA PEEK,POKE,POS,PRINT,PUT
220 DATA READ,REM,RENUM,RESET,RESTORE,RESUME,RETURN,
RIGHT$,RND,RSET,RUN
230 DATA SAVE,SGN,SIN,SPACE$,SPC(,SQR,STEP,STOP,STR$
,STRING$,SWAP
240 DATA TAB(,TAN,THEN,TO,TROFF,TRON,UNLOAD
250 DATA USING,USR,VAL,VARPTR,WAIT,WIDTH,XOR,"\"
260 '
270 '...FILL ARRAY WITH RESERVED WORDS
280 '
290 RW=0
300 READ RW$
310 RW=RW+1 : RW$(RW)=RW$ : IF RW$="\" THEN 350
320 I=ASC(RW$)-ASC("A") : IF PT%(I)=0 THEN PT%(I)=RW
330 GOTO 300
340 '
350 FOR I=1 TO 25 : IF PT%(I)=0 THEN PT%(I)=RW
```

```
360 NEXT I
370 '
380 '...GET LIST OF NAMES
390 '
400 FX=0
410 PRINT : PRINT TAB(20);"   ---> ASCII SAVED PROGR
AM #" FX+1 " = "; : LINE INPUT L$
420 IF L$="" THEN IF FX<1 THEN 570 ELSE 480
440 NAME L$ AS L$
450 FX=FX+1 : F$(FX)=L$
460 GOTO 410
470 '
480 PRINT:PRINT TAB(20);: INPUT "   ---> DATE = "; D
$
483 PRINT:PRINT TAB(20);"NOW INDICATE WHETHER YOU WI
SH:"
485 PRINT TAB(25);"- A PRINTED CROSS-REFERENCE LISTI
NG(S)"
486 PRINT TAB(25);"- A PRINTED PROGRAM SOURCE LISTIN
G(S)"
487 PRINT TAB(25);".....OR BOTH."
490 PRINT:PRINT TAB(20);: INPUT "1) CROSS REFERENCE
  2) LIST   3) BOTH "; M
500 '
510 '...PROCESS LIST OF NAME FILES
520 '
530 FOR F=1 TO FX
540 CLOSE : OPEN "I",1,F$(F) : PRG$="'"+F$(F)+"'   -
   "+D$ : GOSUB 610
550 NEXT F
560 LPRINT STRING$(65-LZ,CHR$(10))
570 END
580 '
590 '...INITIALIZE CROSS REFERENCE
600 '
610 LC=0 : BC=0 : PZ=0 : V$="" : C$="" : VC=91 : RC=
-1
620 FOR I=1 TO 91 : VNXT%(I)=-1 : NEXT I
630 IF M>1 THEN GOSUB 1520
640 '
650 '...INPUT LINE AND EXTRACT LINE NUMBER
660 '
670 IF EOF(1) THEN 1200
680 LINE INPUT #1, L$ : IF M>1 THEN GOSUB 1430 : IF
M=2 THEN 670
690 LG=LEN(L$) : BRNCH=0 : ER$="" : LC=LC+1 : BC=BC+ LG
700 LP=INSTR(L$," ") : LN=VAL(LEFT$(L$,LP)) : PRINT LN,
710 IF LN>32767 THEN LN=LN-65536!
720 '
730 '...PARSE REST OF LINE
740 '
750 LP=LP+1 : IF LP>LG THEN GOSUB 1010 : GOTO 670
760 C$=MID$(L$,LP,1)
770 IF C$>="A" AND C$<="Z" THEN 890 ELSE IF C$>="0"
AND C$<="9" THEN 1150
780 IF C$=" " THEN 750 ELSE IF C$<>"," THEN BRNCH=0
790 IF C$=CHR$(34) THEN GOSUB 1010 : LP=INSTR(LP+1,L
$,C$) : IF LP>0 THEN 750 ELSE 670
800 IF C$="'" THEN GOSUB 1010 : GOTO 670
810 IF C$="&" THEN GOSUB 1010 : V$=C$ : GOTO 750
820 IF C$="$" OR C$="!" OR C$="%" OR C$="#" THEN GOS
UB 1130 : GOTO 750
830 IF C$="(" THEN GOSUB 1130
840 GOSUB 1010 : IF C$<>"," THEN ER$=""
850 GOTO 750
860 '
870 '...TEST FOR COMMAND
880 '
890 C=ASC(C$) : P=PT%(C-ASC("A")) : BRNCH=0
900 IF C<ASC(RW$(P)) THEN 1160
910 IF INSTR(LP,L$,RW$(P))<>LP THEN P=P+1 : GOTO 900
920 GOSUB 1010 : RW$=RW$(P)
930 IF RW$="DATA" THEN LP=INSTR(LP,L$,":") : IF LP>0
 THEN 750 ELSE 670
940 IF RW$="REM" THEN 670
950 IF RW$="GOTO" OR RW$="GOSUB" OR RW$="THEN" OR RW
$="ELSE" OR RW$="RESUME" THEN BRNCH=1
960 IF RW$="ERASE" THEN ER$="(" ELSE ER$=""
970 LP=LP+LEN(RW$)-1 : GOTO 750
980 '
990 '...END VARIABLE
1000 '
1010 IF V$="" THEN RETURN
1020 IF V$>"A" THEN V$=V$+ER$ : C=ASC(V$)+1 ELSE IF
 V$>="0" THEN V$=RIGHT$("    "+V$,5) : C=VAL(LEFT$(V
$,2)) ELSE 1090
1030 IL=-1 : I=C
1040 IF V$>V$(I) THEN IL=I : I=VNXT%(I) : IF I>0 THE
N 1040 ELSE 1060
1050 IF V$=V$(I) THEN J=LST%(I-91) : IF RFL%(J)=LN T
HEN 1090 ELSE RC=RC+1 : NXT%(J)=RC : GOTO 1080
1060 VC=VC+1 : IF IL>=0 THEN VNXT%(IL)=VC
1070 V$(VC)=V$ : VNXT%(VC)=I : RC=RC+1 : FRST%(VC-91
)=RC : I=VC
1080 RFL%(RC)=LN : NXT%(RC)=-1 : LST%(I-91)=RC
1090 V$="" : RETURN
1100 '
1110 '...EXPAND VARIABLE
1120 '
1130 IF V$<>"" THEN V$=V$+C$
1140 RETURN
1150 IF V$="" AND BRNCH=0 THEN 750
1160 V$=V$+C$ : GOTO 750
1170 '
1180 '...LIST VARIABLES
1190 '
1200 IF M=2 THEN RETURN
1210 PZ=0 : GOSUB 1400
1220 FOR J=0 TO 91 : V=J
1230 V=VNXT%(V) : IF V<=0 THEN 1340
1240 IF LZ>56 THEN GOSUB 1400 ELSE SZ=SZ+1 : IF SZ=3
 THEN GOSUB 1410
1250 RZ=0 : I=FRST%(V-91) : LPRINT V$(V);
1260 IF RZ=0 THEN LPRINT TAB(16);
1270 LN=RFL%(I) : IF LN<0 THEN LN=LN+65536!
1280 LPRINT USING "    #####";LN,
1290 RZ=RZ+1
1300 IF RZ>6 THEN RZ=0 : LPRINT : LZ=LZ+1 : IF LZ>56
 THEN GOSUB 1400
1310 I=NXT%(I) : IF I>0 THEN 1260
1320 IF RZ>0 THEN LPRINT : LZ=LZ+1
1330 GOTO 1230
1340 NEXT J
1350 '
1360 LPRINT STRING$(80,"=")
1370 LPRINT "LINES: " LC "     BYTES: " BC "     SYM
BOLS: " VC-91 "     REFERENCES: " RC+1
1380 LZ=LZ+2 : RETURN
1390 '
1400 GOSUB 1520 : LPRINT "SYMBOL" TAB(20) "REFERENCE
 LINE" : LZ=LZ+1
1410 LPRINT STRING$(80,"-") : LZ=LZ+1 : SZ=0 : RETURN
1420 '
1430 X=1
1440 IF LZ>60 OR RIGHT$(L$,3)="'PG" THEN GOSUB 1520
1450 Y=INSTR(X,L$,CHR$(10)) : IF Y>0 THEN LPRINT MID
$(L$,X,Y-X) : LZ=LZ+1 : X=Y+1 : GOTO 1450
1460 LPRINT MID$(L$,X,LW) : LZ=LZ+1 : X=X+LW : IF X<
LEN(L$) THEN 1460 ELSE RETURN
1470 '
1480 IF ERR=53 THEN PRINT : PRINT "FILE NOT FOUND" :
 RESUME 410
1490 IF ERR=58 THEN RESUME 450
1500 ON ERROR GOTO 0
1510 '
1520 LPRINT STRING$(65-LZ,CHR$(10))
1530 PZ=PZ+1 : LPRINT TAB(72) "PAGE" PZ
1540 LPRINT PRG$ : LPRINT
1550 LZ=3 : RETURN : REM ------ END OF PROGRAM ----
```

GIVE YOUR PRINTER A FACELIFT.™

Your printer manual probably shows a lot of faces that the printer is supposed to print. With lots of complicated instructions you don't have time to learn.

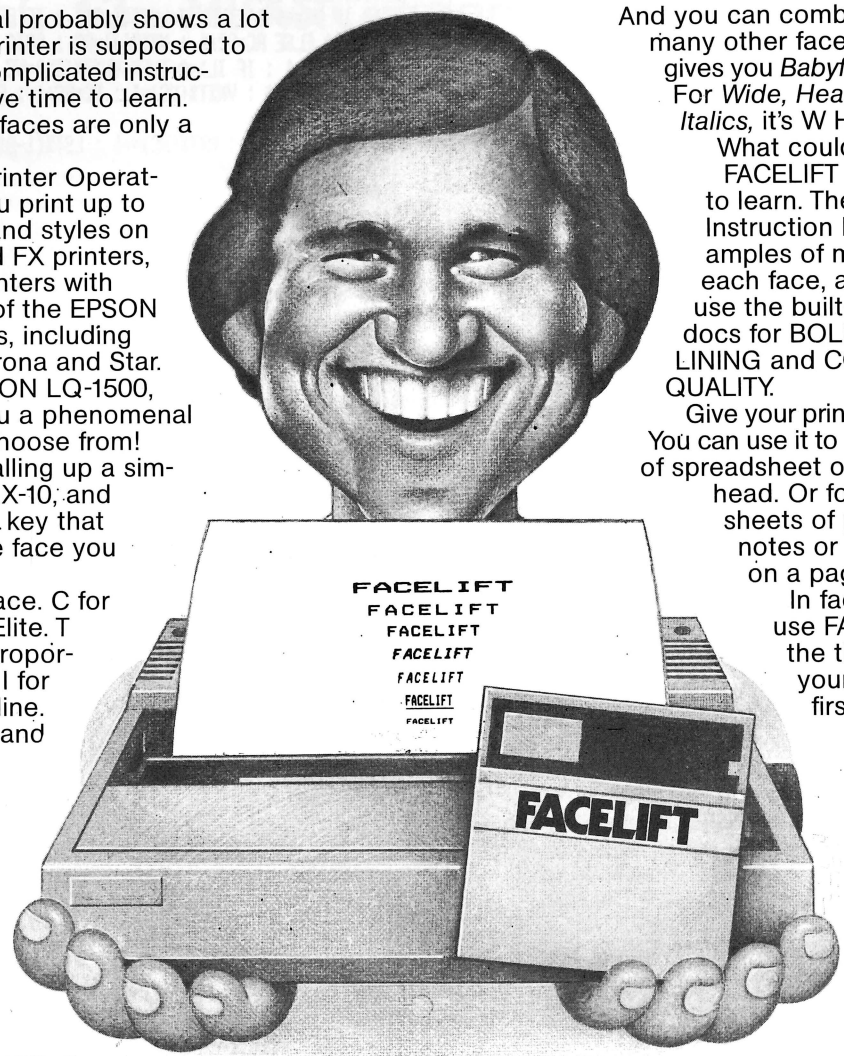
Well, now those faces are only a typing key away.

The FACELIFT Printer Operating System lets you print up to 92 different sizes and styles on the EPSON RX and FX printers, the EPSON MX printers with Graftrax, and any of the EPSON compatible printers, including Okidata, Smith Corona and Star.

On the new EPSON LQ-1500, FACELIFT gives you a phenomenal 416 typefaces to choose from!

It's as easy as calling up a simple menu on the QX-10, and pushing the typing key that corresponds to the face you want.

Like B for Babyface. C for Condensed. E for Elite. T for Trimline. P for Proportional. W for Wide. I for Italics. U for Underline. D for Doublestrike and H for Heavy.



And you can combine the above to get many other faces. For example, B I U gives you *Babyface Italics, Underlined.* For *Wide, Heavy, Doublestrike Italics,* it's W H D I.

What could be simpler?

FACELIFT takes only seconds to learn. The clear, easy-to-read Instruction Manual gives you examples of margin settings for each face, and tells you how to use the built-in commands in Valdocs for BOLD, ITALICS, UNDERLINING and CORRESPONDENCE QUALITY.

Give your printer a FACELIFT today. You can use it to get 12 month's worth of spreadsheet on to a normal letterhead. Or for printing on small sheets of paper, making footnotes or getting more words on a page.

In fact, you'll probably use FACELIFT for lots of the things you bought your printer for in the first place.

It'll help you get your printer's worth.

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Here's my $29.95 *Plus $2.50 POSTAGE & HANDLING ($32.45 TOTAL)*
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Specify Computer Make and Model_____

FACELIFT, P.O. BOX 4339, WHITTIER, CA 90607 EC

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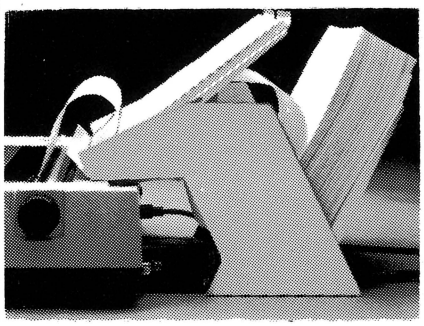
NEW PRODUCTS

PX THE RETRIEVER CP/M $39.95

The Retriever allows recovery of lost microcassette files. It can be used on any tape on which the directory has been lost (when the tape has inadvertently been INITialized).

Whalesong Software
P.O. Box 1183
Franklin, PA 16323



X PORTER FANFOLD I/O SYSTEM $64.50

This is a new system of printer paper handling. The Porter System holds the blank paper for the printer, displays, and stores the resulting printout. Positioned behind the printer, the system will hold up to 1000 sheets of fanfold paper in a space a small as 8 inches deep.

Peri-Comp, Inc.
P.O. Box 148
Lake Geneva, WI 53147

QX THE BOSS CP/M MS-DOS $1,595

This series of business packages includes a financial accounting system, an inventory accounting system, a payroll management system, and a time billing system. The systems may stand alone or integrate with the others. Each module features: an easy installation section, word processor controls, user-installed function keys with word process controls, fill-in forms prompting, complete error checking of data entry, and a three level password program.

Balcones Computer Corporation
5910 Courtyard Drive
Austin, TX 78731

QX HOW TO V2 BOOK $19.95

This is a 300 page manual written by RSI staff for internal use. Available on two disks and written in Valdocs 2, you can read it on-screen, or print it out on your printer.

RGCS Compiler $75.00

This is a pseudo-compiler for RSI basic programs. It produces a command file (.SYS extension file) directly from the Basic program. The SYS file can then be executed directly in the VALDOCS environment, under TPM or from the MENU key.

CUSTOMER SERVICES TECHNICAL BULLETINS $25.00

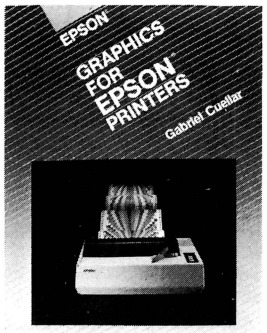
The Bulletins will be published on disk and distributed bi-monthly beginning with August. These technical bulletins will include information on known bugs, bug fixes, technical tips, and new software product news.

Rising Star Industries, Inc.
225500 Hawthorne Blvd.
Suite 2000
Torrance, CA 90505

QX INFO-80 CPM $395

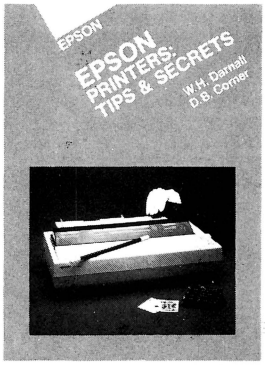
INFO-80 is a complete data base system suitable for the beginner as well as the advanced user. It includes building blocks for file definition, report and letter writing, data entry and editing, file sorting and merging, file format conversion and menu driven job control. It allows INFO-80 files to be merged with text for correspondence processing.

The Software Store
706 Chippewa Square
Marquette, MI 49855



X GRAPHICS FOR EPSON PRINTERS BOOK $19.95

Learn how to manage typefaces, equations, and complex shapes by controlling your printer through basic programs. Details for producing dots, lines, circular shapes, three-dimensional graphics are addressed in this book by Gabriel Cuellar.



X EPSON PRINTERS: TIPS AND SECRETS BOOK $19.95

Learn to control your Epson printer in text and graphic modes from within word processing and other programs by using commands in various programming languages. Included are lists of symptoms, causes and remedies, as well as system checkout procedures. Authors: W.H. Darnall and D.B. Corner.

NCC Show News

QX-16 with an internal 10M half-height hard disk drive (retail $3495.), kits for the FX-80/80+/100/100+ printers to upgrade them to the FX 85/185, two new printer books (see New Products), an Epson 10M hard drive with the QX-11 (Vertical market products, not individual consumer items), and from Information Management Systems, who have a LAN (Local Area Network) for the Geneva, an RF transmitter/receiver system for wireless communications. Epson O.E.M. (Original Equipment Manufacturers) had two new Epson 5.25inch half-height winchester disk drives, 10M and 20M, along with a small ribbonless 7-color ink-dot printer.

Software Critics Agree

SmartKey II Plus dramatically speeds up and improves accuracy in computing by letting you reduce multiple keystrokes to the touch of a single key. Thousands of practical applications. Available for both CP/M and MSDOS computers. Works to speed up your computing even while operating other software.

SmartKey II Plus Combo Pak $49

—includes SmartPrint II Plus and Screen Smarts

Teach SmartKey to recall software commands, words, paragraphs, or entire pages of data at the touch of a key. Make a series of "smartkeys" out of most of the keys on your Epson. Store "smartkey" definitions in a special file. Call them up whenever you want to run a favorite program or work on a project. Imagine saving complex software command codes, boilerplate paragraphs, inventory numbers, or whatever, and then injecting any of them into your work with the stroke of a key. SmartKey will not interfere with the regular operation of your keyboard. Indeed, SmartKey enhances your keyboard.

The Critics on SmartKey

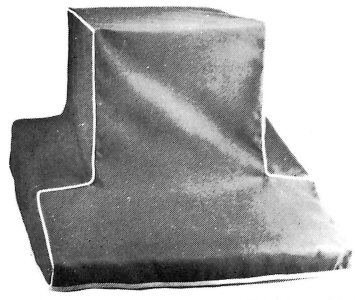
- "Excellent..." InfoWorld
- "Works like a charm..." *MicroSystems*
- "A must for every computer..." Peter McWilliams, author *The Word Processing Book*
- "SmartKey is a utility I recommend... ...The result is less frustration and greater speed and accuracy in entering data." John D. Yoder, PhD *Reviewer — Epson Connection*
- "...SmartKey is considerably easier to learn ...SmartKey would be my choice..." Bob Hermann *Reviewer — Epson Connection*

Central's super priced **$49** *SmartKey II* combo pak includes *SmartPrint II Plus*, a program that greatly enhances the operation of dot matrix printers, and a free copy of Paul Golding's $15.95 book, *Screen Smarts, The Computer Tamer's Guide*. This book tells how you can use SmartKey to turn your computer into a supercharged mean machine. Order today to get this hard hitting $115 software & book combo for only $49.

Introducing A Classic Form Fitting Epson Cover

At last, the classic Epson dust cover you'll be proud to own and use. This first rate computer cover is made from a premium, lint free, static free, washable, free breathing, and fade resistant sailcloth. It comes in a rich looking Navy blue or Sand. The Navy cover has a smart contrasting silver gray piping and trim that adds a superior finished look. Not to be outdone, the Sand cover is handsomely finished in a rich chocolate piping and trim.

Photo: Form-fitting cover over CPU, monitor, and keyboard.



Matching sailcloth covers for all Epson and ComRiter printers: $15.95. Please indicate make and model of printer.
New. Special 2-piece QX-10 cover: $21.95 per set.

For a limited time only, your price for this factory direct, custom made, one-piece sailcloth Quality Cover is $18.95. When ordering remember to indicate color preference. This special low price is subject to change. You must be completely satisfied with your purchase of this cover or we will refund your money immediately. Order today.

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Font is an easy–to–use software pa
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Actual sample produced by an MX-80 and Fancy Font.

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Fancy Font styles include Roman, Bold, Italic, Script, Old English, and more. In addition, custom forms, invoices, labels, signs, foreign languages, mathematical notations, view graphs, resumes, newsletters, brochures, complete manuals, invitations, place cards, and high-resolution, proportionally spaced, letter quality business and personal letters can all be printed on your Epson printer with *Fancy Font* at the helm. *Fancy Font* is a product of SoftCraft Inc. You may have seen SoftCraft's national ads. They are printed with *Fancy Font* on an Epson printer. The ad is powerful visual medicine. The list price for the fully documented *Fancy Font System 2.0* is $180. Central's price is only $149. Order *Fancy Font* today and add an amazing sparkle of creativity to all your printed materials. Please indicate name and model of your printer when ordering. *Fancy Font* will make your Epson printer and Valdocs or CP/M word processor come alive. It's magical.

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Turn your Epson into an IBM-type computer for only $399. Titan Technologies' new QX-PC2 is a popular snap-in card that fits into an easy-to-reach slot in your Epson QX-10. The QX-PC2 helps you make your Epson into a rip roaring IBM-type computer within minutes.

"...the QX-PC2 is an inexpensive alternative to trading your QX-10 in on a 'newer' technology. It is a tool that once mastered will expand the QX-10 to a new level of computing. I would be lost without it."
— Jim Markevitch
— *Epson Connection*

QX-PC2 OPTIONS GUIDE

Description	List	Price
192K QXPC2	$ 595.00	$399.00
256K QXPC2	$ 670.00	$499.00
384K QXPC2	$ 895.00	$650.00
512K QXPC2	$1045.00	$799.00
128K Aux	$ 249.00	$199.00
256K Aux	$ 399.00	$329.00
Ram Software	$ 39.00	$ 36.00

192K Standard MSDOS co-processor card.
256K Standard card with more memory.
384K Standard card and attached memory.
512K Standard card. Maximum expansion.
128K Aux 128K Auxiliary card adds memory.
256K Aux Auxiliary card adds memory.
Ram Soft Ram disk software for card.
— All units fully supported by Titan.
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- Support for hard disk
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The QX-PC2 co-processor board is an expertly conceived component that contains the guts of an IBM computer. It includes a powerful 16-bit 8088 CPU. Comes standard with a full 192K of Ram, its own built-in memory, and is fully expandable to 512K Ram. Yes, your Epson is now clearly an excellent place to experience 16-bit processing without sacrificing your original investment in an innovative 8-bit computer.

The QX-PC2 lets you operate software that other IBM-emulators can't. The QX-PC2 board lets you use virtually all the software written for the IBM PC including the tough stuff like Lotus 1-2-3, Symphony, dBase III, and Framework. Thousands of dedicated Epson users and corporations have found the QX-PC2 turns an Epson into a whole new exciting computer able to use thousands of IBM-type software programs. You will too.

Don't spend thousands of dollars on an IBM-type computer in a fast changing market when you can get one on a card, plug it into your Epson, and get identical results. It's easy to operate a world of 16-bit IBM-type software on your Epson with the QX-PC2 co-processor. In addition, with the QX-PC2 board in your Epson, you can still operate CP/M and TP/M software. You can't do that on a straight IBM machine. The retail price of Titan's new QX-PC2 card with standard 192K Ram, operating manual, and MS-DOS system disk is $595. Central Computer is proud to add Titan Technologies' products to our line. For a limited time only, Central's low introductory price to the standard QX-PC2 card is $399. Please see the *QX-PC2 Options Guide* above for information on optional features. Order today to begin experiencing IBM-type power on your Epson soon. Central promises to beat any advertised price on this unit. It's time to upgrade that computer. Order today to get the QX-PC2 board fast. In stock, ready for immediate delivery. This offer may not be repeated. Order today.

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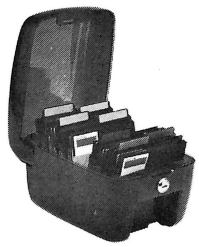

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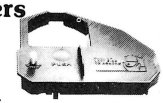
LQ 1500 Users



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SuperCalc	**Gives fast results.**	$ 75.00	$ 54.00
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Supplies			
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QX-10 User's Guide, Hansen		$ 17.95	$ 15.95
Screen Smarts, Computer Tamer		$ 15.95	$ 12.95

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Home and small business accounting can't get any easier than this. Please don't spend another moment thinking about computerizing your checkbook. You can start getting that checkbook in shape now. The list price of *Quick Check* is $95. Central's current price is $79. Order today.

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Input for a *SuperFile* database comes from your word processing Valdocs, CP/M, or MSDOS program, so you can easily include information you already have into a database without having to re-key it. No fancy fields to define. This is a completely free-form database system. No programming language to learn. There's nothing difficult here. You can be up and running within minutes. *SuperFile* uses logical searching procedures to find your information fast. Tell *SuperFile* what information you want, and it searches from 60 to 400 entries per second. Save yourself the time and effort of filing and cross-filing information by hand or in overly structured data fields. The list price of *SuperFile* is $195. Order today to get *SuperFile* at our current low price of $145.

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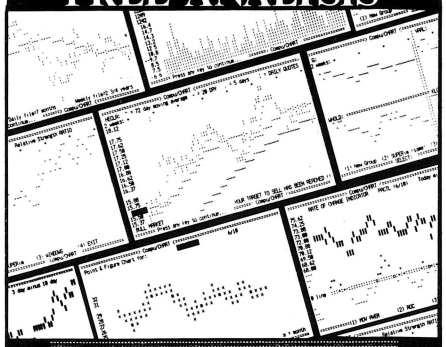

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The Users

by Paul Rothweiler

"Who are those guys?" a perplexed Robert Redford once asked Paul Newman in "Butch Cassidy & The Sundance Kid"---a line that has since become one of the most famous movie queries ever uttered.

With this column we'd like to ask the same question, but in a different way. We'd like to know who **you guys** are, especially those of you who can help us bring exciting ideas and new solutions to both old and new problems to your fellow **USERS** of Epson computers.

No one knows Epson computers as you, their users, do. No one has more hands-on time at them than you do. No one has learned more "trade secrets" about them than you. Are you willing to share what you've learned?

We hope so, for there's a mother lode of knowledge among you that's going untapped and it's a shame. One of the greatest aspects of **Users Groups** is the free exchange of information and solving of problems that goes on there. Some groups have their own newsletters that contain tips on how to do this and fix that, but they rarely circulate outside the group itself, so the tips they print go no farther. We'd like to remedy that by printing "Users Tips" we feel are most likely to benefit most Epson Users in **THE USERS** column, a new feature in the EpsonConnection, written by you, the reader. We would also like to encourage all "active" Users Groups to have your representative contact us so that we may exchange information as well as keep each other up-to-date. In addition, if your group does publish a newsletter we invite you to participate in a one copy, "ours for yours" exchange.

We're asking you to write in and tell us, in as few words as possible---as simply as you can---what **you've** discovered about Val 1 or 2, CP/M-80 or the QX-10 (11 or 16), PX-8 and HX models. If we print your "UT" we'll credit it to you and your **USERS GROUP**.

Here's the kind of thing we're looking for:

What do you do if you come face to face with the famous (or infamous!) Zapple monitor who motors around in the TPM corridors of the QX (for debugging, Epson says) and rears his head occasionally when the computer gets confused? A few days after I began using my QX-10 I met the big Z and had no idea what to do about him. The system was as dead as if the power had been shut off---I couldn't get Val (1.19) to reboot and get Zapple off my monitor.

"Zapple? What's that?"said the man from the computer store. He knew a lot about several different computers, but nothing of the big Z. So I had to experiment and work out my problem myself. What I learned was that you can get rid of Zapple by pushing the reset button with the CP/M-80 disk in the left drive. Suddenly things are normal again and you can reboot Val without difficulty.

Best Place To Get Answers

One of the smartest moves I made after I brought home my friend "MAX" (my QX-10) from the computer store was to check out the Ledgewood (New Jersey) Users Group (I learned of its existence from the EpsonConnection). I quickly discovered it was the right place to seek answers to problems that came up and pick up tips that could help me use MAX more efficiently.

Here are a few:

Can you print Val documents out of CP/M? *Yes, through the "P" option of CP/M's powerful INDEXER utility.*

How do you work out a mail merge from a system that doesn't have one built in? *With the "VALMERGE" program Epson made available to Users Groups last year. It's supposed to work in Val 2 as well, but we haven't tested it yet.*

Is there any way you can get back a Val document you've "thrown away" without STORING? *There is no effective way we have discovered.*

What good is CP/M-80? *Awfully good or no good, depending on whether you make an attempt to learn it and take a look at the warehouse of programs it will run.*

Can you copy or delete files faster in CP/M than in Val? *Yes, infinitely faster. You can mass delete or copy in less time than it takes to tell about it. As nice*

as it is to be able to tag files in Val 2's COPYDISK and mass copy and delete them, CP/M-80's INDEXER still works faster.

With the advent of Val 2, going to weekly or monthly meetings of a Users Group is as fascinating as being a resident of PEYTON PLACE. In a different way, of course.

For example: What do you do when you're copying an indexed file in Val 2 and you get a message on your screen prompting you to replace the "Original data disk in Drive A". It comes right after the system prompts you to replace the system disk in drive A and your first reaction is "Huh?" The original data disk is the disk in the B drive---the one you were copying from---isn't it?

No, it isn't. The "original data disk" the system wants is the one you were copying **to**---the one you just took out of the left drive and replaced with the system disk. When you don't put that disk back in A, you get an error message (Can't find "CPYDWORK.VAL") and the copying process is aborted.

With its new array of programs Val 2 offers plenty of room for discussion and no doubt some interesting tips will come out of them.

Send Us Your Tips

Mail your UT's (User Tips) and Users Group information to: The Users Column, EpsonConnection, P0 Box 14027, Detroit, MI 48214, or use your modem and call the EpConn SOCIS/BBS (313) 823-1425 and enter the User Tip Message Base. We'll print as many as we can. All submissions become the property of the EpsonConnection, and are subject to all editorial rights by the publisher.

UT

We'll leave you with one UT of our own. As you may know the CP/M-80 2.25 release has a great INDEXER utility. You can use INDEXER's **"V"** command (VIEW) to get a quick look at Valdocs document files when you're searching for something specific and you're not sure where it is or on which disk, or where you lost your index. INDEXER calls up documents so fast (about half a second) that you can go through an entire twenty or thirty files in just a few minutes.

More next month, and lets hear from you too. ■

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•VALDOCS USER TIPS•

☐ **Changing between Versions 1 and 2**
Contributed by Mike Myers
(Lincoln, NB)

Each time you change between Versions 1 and 2 your computer will have to be reset, which re-initializes your QX computer to the original default settings, beginner experience level, MX-80, etc. Some users have sent in elaborate procedures using DEFKEY to make the switch easier, setting up your experience level, printer, modem, etc. There is a much easier way to accomplish this. After you put in your Valdocs system, or load disk, you will see the message "The system is being initialized.." and prompts you to either press RETURN (Valdocs 2) to begin loading, or press RETURN (Valdocs 1 series) to continue. Instead of doing this, just press **CONTROL C** and your setup and Valdocs version will be loaded. If you then want to change back to the other Version, press RESET, and when you see the message again, "The system is being initialized", press CONTROL C again, and proceed. This represents a tremendous time savings when switching between the two Versions.

☐ **Valdocs 2 and Random House Proofreader (Version 1.16)**
From B. Paul Horne, Jr.
(Franklin, IN)

Paul has been successful in using the *Random House Proofreader* by Digital Marketing Software with Valdocs 2. His steps are as follows:

1. Complete a document, then use CTRL P to set the left margin to 0 (zero), and move the right one to keep the distance between margins at 6.00.
2. STORE it, and name it in the normal fashion.
3. Return to the editor and RETRIEVE it.
4. Then use CTRL Q (Quirks Menu) and STORE it as a non-indexed file. Select Ascii file.
5. Copy down the Valdocs file name (B0:YYMMDD###.VAL) for later use, then press STORE. It will indicate the file already exists, press STORE to delete the old file and save the new one.
6. Return to the editor and press MENU.
7. EXIT to TPM.
8. At the A<, remove your Valdocs disk and replace it with your Proofreader disk. Press CTRL C.
9. At the A< enter "PRF B:YYMDD###.VAL" (replace this with the name of your file) and press RETURN.
10. The proofreader will proceed until finished. At the A< remove the proofreader disk and replace it with your RUN disk. Press CTRL C and type "RESTART" followed by a return.
11. Return to the Editor, depress RETRIEVE twice, and insert any type-style changes you desire (underlining, size, bold, italics...)

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12. Check the pagination since ASCII adds five lines at the top of each page, and 6 at the bottom. It's easy and works.

Note: you will need to be SETUP at advanced or expert experience level in the SETUP program.

☐ **Call Waiting and your Modem**
Contributed by Bill Nagler, M.D. (Southfield, MI)

For those with call waiting on your phone, this convenience can become a real detriment when using a modem to transmit or receive information. The solution is NOT to get rid of it, but to add call forwarding to forward your incoming calls to another number before using your modem. Just remember to un-forward your calls when you're done.

☐ **Don't turn your knob!**
From the Epsonians April issue (Jacksonville, FL)

You should NEVER turn the knob on the right side of your printer when the printer is turned on. When you do this, you are forcing the printer to do something that it is trying not to do. This places a great deal of strain and wear on the precision gears in the printer, with an end result that the printer may have difficulty positioning paper properly in the future.

☐ **More V2 Tips**
Contributed by Miles Hoover Jr. (Herndon, PA)

☐ **Mouse**

To use the mouse with Valdraw/Paint you need to indicate in SETUP that you have a HAYES 1200 baud modem (whether or not you do) in order to function properly.

☐ **LQ1500**

There are two versions of the LQ1500 printer. The older model has an onboard ROM Version 1.8, the newer one has Rom Version 2.0. The newer version is not fully supported under the Valdocs 2 LQ1500.stl printer setup program. It will not print the HASCI graphics font set. To tell which version you have, run the self-test (put wide paper in, with the power off hold down the LF-LineFeed button and turn the printer on).

☐ **FX and Right Justified Text**

If you select right justified text, correspondence quality with an FX you will find it exceedingly slow to print, going over the words three times each.

☐ **Wrong keyboard**

If you suddenly are prompted to press the EDIT key, and have the original keyboard without it, press CTRL M (miscellaneous menu), Erase screen, Throw away document. When you reboot, go right to the editor, and the problem should be taken care of. If this does not work, go into COPYDISK, and go to single file operations, and delete the file named "EDITCUR0.VAL" from your data disk (in the B drive).

☐ **Hayes 300 Modem Problems**

The Hayes 300, older version with the round power plug works fine with Valdocs 2 mail, however if you have the square power plug, you will have trouble receiving with Valdocs 2 Mail. There was an undocumented revision in software within the HAYES. ■

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WARNING: This software product can become highly addictive if used frequently.

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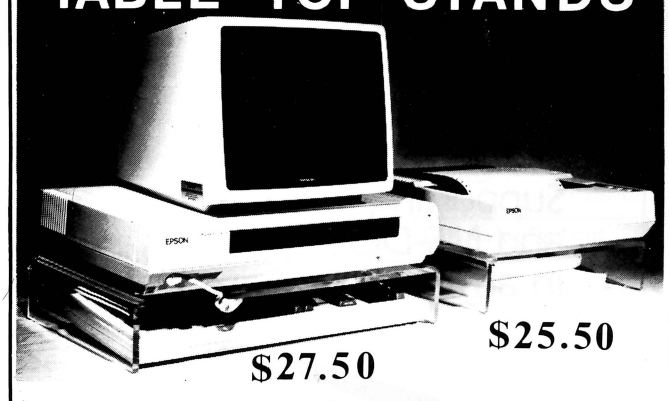

These custom stands for the QX-10 and Epson printers are made of heavy gauge 3/8 inch clear aclylic with polished edges and non-skid feet. The QX-10's keyboard slides underneath when not in use to protect it and free desk space for other uses. Inserting disks is easier and screen is raised to a better viewing height. Sturdy printer stand provides front or rear access to paper and requires no extra desk space. Available for 80 or 100 series printers (add $3.00 for larger model). Order by mail or phone and pay by check, M.O. or C.O.D. Same day shipment and 20 day return policy. Please add $3.00 per unit for shipping and $1.65 for COD's. MD residents add 5% sales tax. Dealer inquiries invited.

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Introduction To The Valdocs Spreadsheet

by Carolyn McCarthy

An outstanding feature of the Valdocs 2 spreadsheet is the ability to create graphic representations from your data. Some of the other spreadsheets on the market also give you this ability, plus the ability to see it graphically in a window in a corner of the spreadsheet, but none as easily, nor as easy to edit as Valdocs.

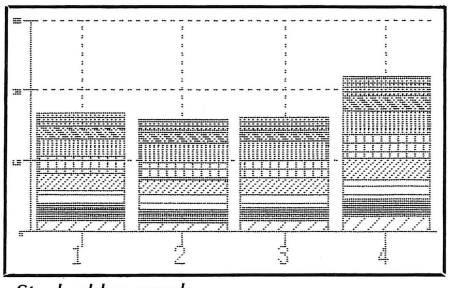
Enter several rows and columns of figures and press the DRAW key. The option <B>ar/line/pie graph will appear, your only option for the initial graph is always a bar graph. Select this option and you will be prompted to enter the names of the spreadsheet cells to be used for the different data sets. You can have up to eight different sets of data graphed on one graph.

Features available include; change the size of the displayed graph from 1-100%, turn any data set into a pie, line or bar graph, have a stacked bar or line graph (see samples), horizontal and/or vertical lines can be displayed, an immediate printout by pressing PRINT, select between 10 different shading possibilities, and in the case of color, different colors.

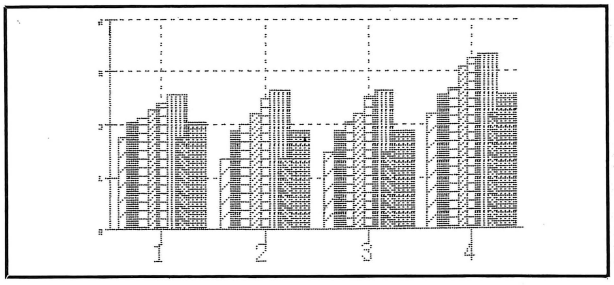
The spreadsheet takes some getting used to if you have used other products. I find it slow compared to PeachCalc, which came with my QX when purchased, and find I only use it for the graphing feature, or to bring a graph into the EDITOR.

There are two different methods currently in use for moving the spreadsheet into the editor. These are detailed in the articles in this issue by Charlie Beeman and Dan Oja. The next update of Valdocs 2 is expected to have this feature well integrated.

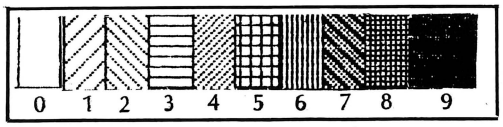
The color version of the QX-10 (which is very difficult and expensive to get) shows exquisite color graphics, and permits you to print them out in color on the JX-80 printer. Without the color board in your computer, you cannot at this time print them out to the JX-80 in color (this was a faux pas by Rising Star). The computer checks for the presence of the color board, before allowing you access to the menus to select color.



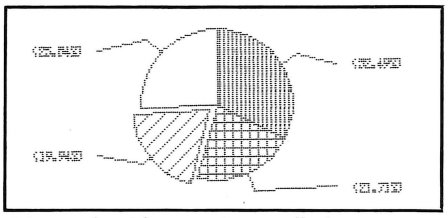
Stacked bar graph.



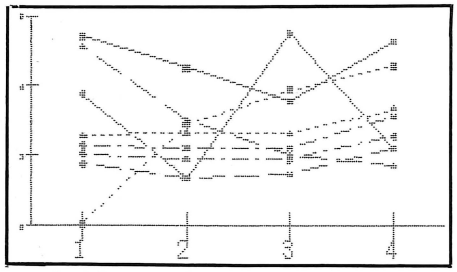
Side by Side bar graph with horizontal and vertical grid lines.



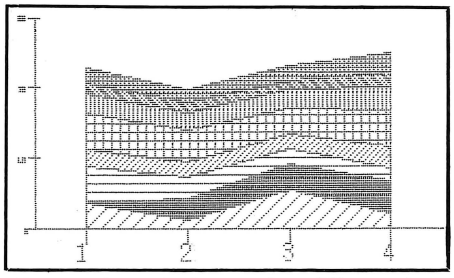
Sample of the shadings available, from 0-9.



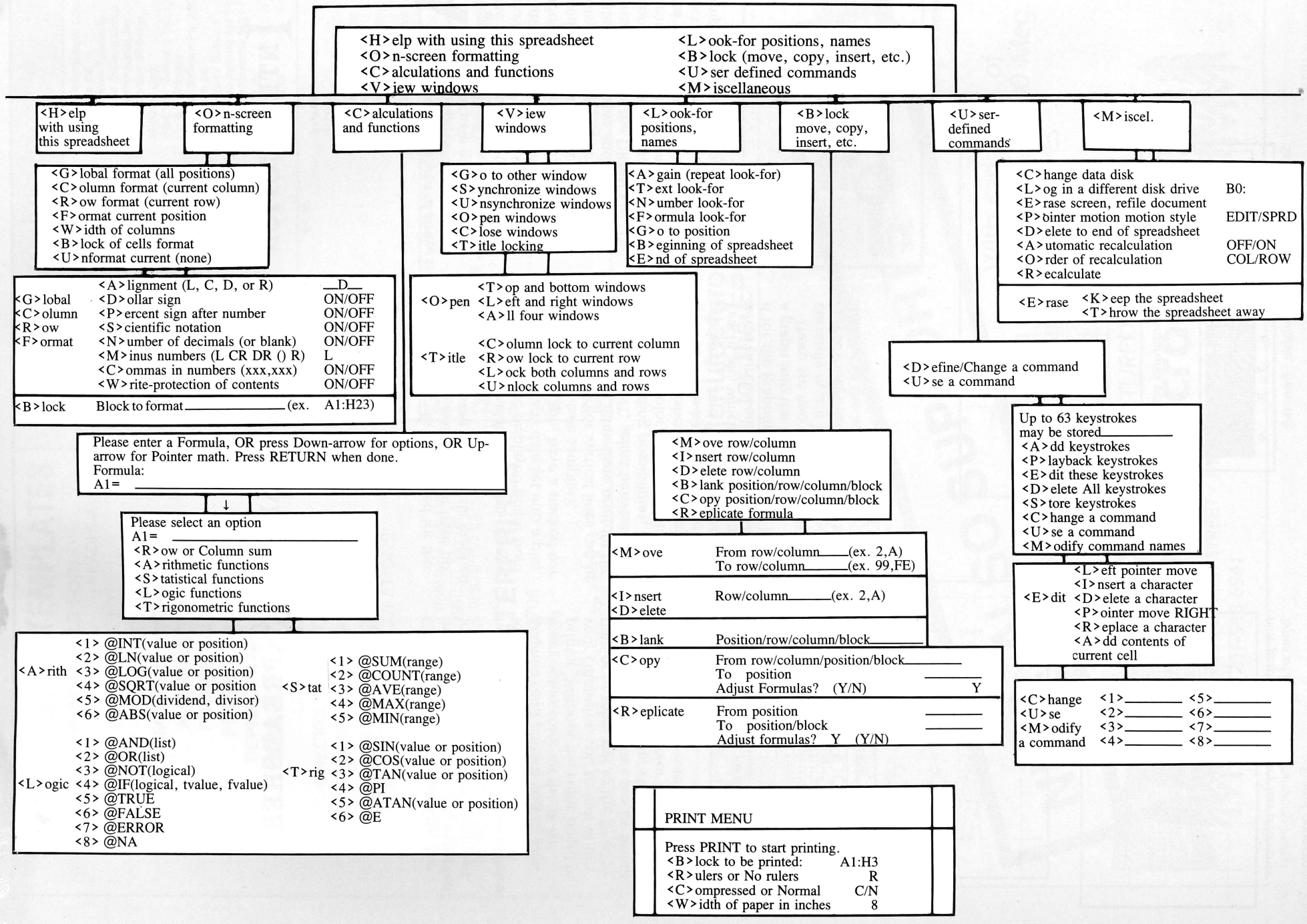
Pie graph with one piece pulled-out.



Stacked line graph.



Line graph, each data set has different types of lines.


<H>elp with using this spreadsheet
<O>n-screen formatting
<C>alculations and functions
<V>iew windows
<L>ook-for positions, names
<B>lock (move, copy, insert, etc.)
<U>ser defined commands
<M>iscellaneous
<H>elp with using this spreadsheet
<O>n-screen formatting
<C>alculations and functions
<V>iew windows
<L>ook-for positions, names
<B>lock move, copy, insert, etc.
<U>ser-defined commands
<M>iscel.
<G>lobal format (all positions)
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<F>ormat current position
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<B>lock of cells format
<U>nformat current (none)
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<A>lignment (L, C, D, or R) D
<D>ollar sign ON/OFF
<P>ercent sign after number ON/OFF
<S>cientific notation ON/OFF
<N>umber of decimals (or blank) ON/OFF
<M>inus numbers (L CR DR () R) L
<C>ommas in numbers (xxx,xxx) ON/OFF
<W>rite-protection of contents ON/OFF
<B>lock Block to format _____ (ex. A1:H23)
<G>o to other window
<S>ynchronize windows
<U>nsynchronize windows
<O>pen windows
<C>lose windows
<T>itle locking
<O>pen
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<L>eft and right windows
<A>ll four windows
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<R>ow lock to current row
<L>ock both columns and rows
<U>nlock columns and rows
<A>gain (repeat look-for)
<T>ext look-for
<N>umber look-for
<F>ormula look-for
<G>o to position
<B>eginning of spreadsheet
<E>nd of spreadsheet
<C>hange data disk
<L>og in a different disk drive B0:
<E>rase screen, refile document
<P>ointer motion motion style EDIT/SPRD
<D>elete to end of spreadsheet
<A>utomatic recalculation OFF/ON
<O>rder of recalculation COL/ROW
<R>ecalculate
<E>rase
<K>eep the spreadsheet
<T>hrow the spreadsheet away
<D>efine/Change a command
<U>se a command
Up to 63 keystrokes may be stored
<A>dd keystrokes
<P>layback keystrokes
<E>dit these keystrokes
<D>elete All keystrokes
<S>tore keystrokes
<C>hange a command
<U>se a command
<M>odify command names
Please enter a Formula, OR press Down-arrow for options, OR Up-arrow for Pointer math. Press RETURN when done.
Formula:
A1= _____
Please select an option
A1= _____
<R>ow or Column sum
<A>rithmetic functions
<S>tatistical functions
<L>ogic functions
<T>rigonometric functions
<M>ove row/column
<I>nsert row/column
<D>elete row/column
<B>lank position/row/column/block
<C>opy position/row/column/block
<R>eplicate formula
<A>rith
<1> @INT(value or position)
<2> @LN(value or position)
<3> @LOG(value or position)
<4> @SQRT(value or position
<5> @MOD(dividend, divisor)
<6> @ABS(value or position)
<S>tat
<1> @SUM(range)
<2> @COUNT(range)
<3> @AVE(range)
<4> @MAX(range)
<5> @MIN(range)
<L>ogic
<1> @AND(list)
<2> @OR(list)
<3> @NOT(logical)
<4> @IF(logical, tvalue, fvalue)
<5> @TRUE
<6> @FALSE
<7> @ERROR
<8> @NA
<T>rig
<1> @SIN(value or position)
<2> @COS(value or position)
<3> @TAN(value or position)
<4> @PI
<5> @ATAN(value or position)
<6> @E
<M>ove From row/column____(ex. 2,A)
To row/column_____(ex. 99,FE)
<I>nsert
<D>elete Row/column_____(ex. 2,A)
<B>lank Position/row/column/block_____
<C>opy From row/column/position/block_____
To position _____
Adjust Formulas? (Y/N) Y
<R>eplicate From position _____
To position/block _____
Adjust formulas? Y (Y/N)
<E>dit
<L>eft pointer move
<I>nsert a character
<D>elete a character
<P>ointer move RIGHT
<R>eplace a character
<A>dd contents of current cell
<C>hange
<U>se
<M>odify a command
<1>_____ <5>_____
<2>_____ <6>_____
<3>_____ <7>_____
<4>_____ <8>_____
PRINT MENU
Press PRINT to start printing.
<B>lock to be printed: A1:H3
<R>ulers or No rulers R
<C>ompressed or Normal C/N
<W>idth of paper in inches 8

Valdocs 2 Spreadsheet

Getting The Most for your Data

By Rev. Charles E. Beeman

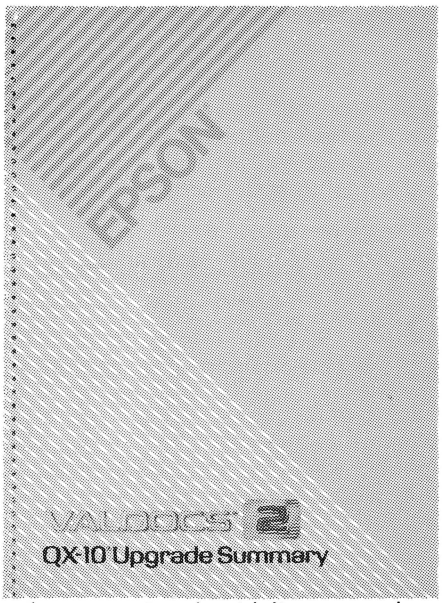
If you have never worked with a spreadsheet and have stayed with the Valdocs environment with your QX-10 or QX-16 you are going to love this addition to the Valdocs software.

Many of the familiar editing keystroke functions are carried over to the spreadsheet to manipulate the cursor around the screen and the familiar HELP button brings you over seventy separate help screens at every menu step.

It's a good idea, during your first sessions with this spreadsheet, to use the HELP button often and experiment with the various options that are offered with these menus. You will find many exciting and unusual options to make your travels around the spreadsheet fast and effective.

Be sure to copy the file HELP1.HLP onto your data disks from the Utility disk or you will wear out your Utility disk inserting and re-inserting it in the left drive when commanded to do so by the HELP program. Use the COPYDISK program to make a copy of the Data disk with this file on it, or expand your skills by using COPYDISK to <M>ake a Data disk and then copy the HELP1.HLP file to it from your Valdocs Utility disk, (see sidebar).

Since the HELP Screens and the "Valdocs 2 Upgrade Summary" manual do an excellent job of guiding you through the manipulation of the spreadsheet, this article will only give



a few operational guidelines to make your experience with the new spreadsheet more enjoyable. Some of the unique features of this spreadsheet program, which set it apart from all the others, will also be pointed out. Those of you who have had experience with other spreadsheets and have become proficient with them will probably experience some frustration when investigating and using the Valdocs 2 spreadsheet. This is because the menus and keystrokes used to call up the various functions are not like those of most other spreadsheets. You will have to re-train yourself to get the same results, a process which may initially slow you down. Most of the features of other spreadsheets are implemented here, including the "Macro" functions of LOTUS 1-2-3. Your data entry will quickly get up to speed if you think of this spreadsheet as an "Area Editor" with automatic calculating functions. The familiar editing keystrokes and function menus have been designed to match, as closely as possible, those common to the Valdocs 2 EDITOR.

TEXT ENTRIES

Pointer Motion Style. . .

Before making text entries, go to the "Miscellaneous" menu (CTRL M), and select <P>ointer motion style. Notice that, as you do, the right side of this menu entry switches from EDIT to SPRD and back again as you continue to press the RETURN key. Set it to EDIT and then press UNDO to return to the spreadsheet. Read pages 3-5, "Spreadsheet Operating Modes" in the QX-10 Upgrade Summary for details on cursor/cell movement.

Entering Text. . .

Using the arrow keys select a cell to accept your text and begin typing just as you would with the Editor. As you fill a cell, the next cell to the right accepts the additional keystroke data until you press RETURN . The cursor will then move down one line and over to the "A" column. If you

want to enter several lines of text beginning in a column to the right of the A column, and you want it aligned beginning with that column, you can use a Window option. Press Ctrl V (View Windows Menu), select <T>itle locking, and then <C>olumn lock to current column. This will lock all the columns to the left of your selected column, and when you enter text and press return, the cursor will not return to the A column, but to your selected column. Remember to <U>nlock the columns when finished.

Each cell now contains whatever portion of your entry its column-width permitted, so your entry may be divided up into separate cell entries. If you need to edit any portion of the entry, move to that cell position, and retype the entire contents of the affected cell. Since the text is not stored as a "string" in its entirety and processed in that manner, if you change the number of characters in a cell in the editing process, you may have to retype the remainder of the line for proper spacing. If the first character in the final cell entry is a number, or the text does not fill the cell, the entry will end up right justified. This can be remedied by going to that cell, enter CTRL O (Onscreen format menu), select <F>ormat current position, and change the <A>lignment function from "D" (Default = Text Left, Numbers Right) to "L" (Left justify all entries). If you are entering a whole block of text, you might use this formatting function to change the default setting for the whole block of text.

Look for, Positions, Names. . .

This function needs to be used with care when searching for text in the spreadsheet. Simply entering a word you are looking for may not find that word. The reason for this is that the program searches cells for a character match beginning at the first (left-most) position in the cell. If the word you seek exists at any other than the left-most position in a cell, it will NOT be found. You must enter the exact sequence of characters beginning at the left-most edge of the cell. However, you do not need to enter the entire cell contents, only the beginning key characters. This function has limited usefulness in searching a block of text for a particular word, but it is fine for locating column titles within the spreadsheet. It seems some improvement is called for here.

One more bit of advice. The search function proceeds by either ROWS or COLUMNS as determined by the <O>rder of recalculation in the <M>iscellaneous menu. The search proceeds forward through the spreadsheet from the location of your cursor. Always start a search from the "A1" (upper-most, left-hand) cell. To get there quickly, simply enter CTRL W before activating a <L>ook-for text function.

SPECIAL "FIX" HINT

Some machines (mine was one of them) end up with a botched up menu screen when you go into the <L>ook-for text, numbers or formulas functions. If this happens to you, press the following keys in sequence:

[X> LINE STORE

and the menu screen will clear for your entry. You won't have this problem again as this procedure resets the CMOS RAM memory in the machine for proper operation. This is also true for the <L>ook-for functions of the Editor. However, in the Editor, you may have to repeat this operation for the second line of the <R>eplace text function.

Printing from the Spreadsheet. . .

There is no provision for defining a block to be printed by use of the arrow keys after initiating a PRINT function. On large spreadsheets that fill more space than the screen itself, I find it useful to provide a table in the upper left-hand corner of the spreadsheet for the printing instructions. This listing should indicate the blocks to be printed and whether they are to be printed

-MAKING A NEW DATA DISK WITH THE HELP FILE INSTALLED-

Copying the HELP1.HLP file from the Utility disk to your data disk.

To make a Data disk with the HELP file installed, on a new, unformatted floppy diskette, the following step-by-step procedure is offered.

The procedure goes like this:

1. Hold the CTRL button down while pressing the "M" key. (CTRL M).
2. The MISCELLANEOUS Menu will come up with the cursor located in the <C>hange data disk selection. Press RETURN.
3. Remove the current data disk from the right drive and replace it with a new unformatted floppy diskette.
4. Press any key and the Valdocs 2 program will inform you that the B Drive is unreadable and to use the COPYDISK program to format a new disk.
5. Press the COPYDISK key and the disk copying menu will appear.
6. Select <M>ake a data disk and press RETURN.
7. You will be asked to put an unformatted disk in the right drive. Since you already have it in place, simply press RETURN again.
8. You will be asked to make a selection of formatting options. Select the <E>pson TPM III 376K" disk option and press RETURN.
9. After the formatting function is completed, press UNDO to get back to the COPYDISK Main Menu.
10. Select the <F>ile copy and press RETURN.
11. You will be prompted to "Enter name of source drive, then press RETURN". Enter "a" and press RETURN.
12. You will then be told: "Place proper disk in drive & press any key". Now remove the "RUN" system disk from the "a" (left) disk drive and insert the "Utility" disk and lock it in place with the PUSH button on the drive.
13. Press RETURN and a directory listing of the files on this disk will appear on the screen.
14. Select the first option, <S>ingle file copy and press RETURN.
15. Use the up/down arrows to bring the cursor to the file named HELP1.HLP and press RETURN.
16. A new menu will be displayed asking you: <I>ndexed Valdocs file or <N>on-indexed file. Select <N>on-indexed file and press RETURN.
17. A new Menu will appear asking: "Copy to same name? <Y>es or <N>o". Select <Y>es and press RETURN.
18. The COPYDISK function will now transfer the file to your new Data disk and when it is finished the screen display will return to the original menu.
19. Press UNDO repeatedly until you are prompted to replace the original "RUN" disk in the left drive and then press UNDO once more to return to the editor.

Does this seem like an involved process? It is! In the future it is a good idea to save this copy as your master, and use the COPYDISK, <C>opy a disk function, to retain the process. You will find it much faster than repeating the steps.

"Compressed" or "Normal". Like this:

```
  :----A---:----B---:----C---:
1:PRINTING INSTRUCTIONS:
2:Page #    Block      Print N/C
3:   1       a7:g47       C
4:   2       h9:o57       C
5:   3      h57:o106      C
6:   4       a48:g90      N
```

With this instruction in the top left corner, and with the cursor in the A1 cell, it will always be visible to help you define the spreadsheet blocks to be printed when you are ready to do a printout.

You can add this to an already existing spreadsheet by entering CTRL B to get into the BLOCK menu. Then select <I>nsert row/column and enter the row as "1" and press STORE. A blank row will be added at the top of the spreadsheet and all the data will be moved down one line. Repeat this operation until you have added all the space you need to handle the listing (e.g., 6 lines in the above example). A word of caution: while your data will be preserved, be aware that if your Spreadsheet has any areas that you have changed from the default format setting -- the data moves but the special format settings do not. Inspect your spreadsheet after any insert function, row or column, to be sure it is as you originally intended. This is especially important on column insertion if you have specified other than the default column width (default = 9).

Printing a Normal (Pica) Type width from a Compressed Screen. . .

A tremendous feature of the Valdocs 2 Spreadsheet is the ability to press the SIZE key, and have the spreadsheet become compressed onscreen, permitting you to view a much larger area. This feature is unique to Valdocs, and with the "SHIFT/ARROW" page movement capability, it may even be faster than LOTUS 1-2-3's block movement functions.

Often you will want a standard size printout, even though your screen is functioning in the compressed mode. There is no need to switch the screen. After you have entered the PRINT menu you have an option for compressed or normal print. By selecting "Normal" print your print page will be formatted in Pica typestyle. However, you must adjust the print-block to accommodate this, since width of the display screen print-block will automatically be entered in the <B>lock to be printed area of the PRINT menu. If you don't do this, the area to the right of the eighty (80) character limit will be printed as a second page, unless of course, you are configured to print out on a wide column printer in the SETUP program.

NOW FOR A TREAT

It is possible to move the "PRINTING INSTRUCTIONS:" table over to the Editor directly from the spreadsheet! This is a function which was not enabled, but present in Valdocs 2 as it was issued to you. The reasons for this are unclear but it may be that the function is not completely "glitch free". The problems are minor though: Here is how to get around them.

You need to go to SETUP, select <S>ystem characteristics, and put yourself into <E>xpert mode of operation. After you do this and press STORE you will find that you have a new option to select, namely <E>xpert options. Select this and in the new screen presented, <E>nable the "^\" Zapple Trap. Press STORE and then UNDO as many times as it takes you to get back to the Editor. Now you are ready to enable the latent "SPREADSHEET TO EDITOR" data transfer function.

Press the CALC key to get into the spreadsheet and if you have a spreadsheet with data on it on the screen, STORE it. Now, with a blank spreadsheet before you press "^\" (CTRL backslash) and you will be in the ZAPPLE monitor. A "@" and four digits will be displayed which mark the program address in the memory where the program was when interrupted. In addition, a ">" prompt will be displayed waiting for your input. You want to reset the CMOS RAM at location 33 to a new value, enabling this function. To read the existing value, type "CI33" and press RETURN. You will get a set of digits that looks like this: "0000 0000". This is the binary equivalent of the hexadecimal number "00".

Now type in "CO33,48" (the letter O not zero) and press RETURN. Check the new value at location 33 by typing "CI33" again and press RETURN. You will get "0100 1000" which equals hexadecimal number "48". This indicates that a proper setting has been achieved.

Now, type "g" and press RETURN twice. You will be back in the program where you started. To clean up the screen, type CTRL M, <E>, RETURN, <T>, RETURN, to throw the temporary Spreadsheet away.

The new function is now active and any time you have data up on the spreadsheet and want to transfer it to the Editor, simply press the EDIT key or hold down the CTRL key and press WORD. Instead of going directly to the Editor you will be given the option of passing spreadsheet data to the Editor along with full HELP screens to assist you.

The "glitch" is this. After the data are transferred to the cursor position in the Editor an "8" will appear on the screen, marking the beginning and ending of the inserted block. Simply move the cursor to these "8's" and delete them. You are back in business with your spreadsheet data now in the Editor. ■

Rev. Charlie Beeman is a Computer Application Consultant in San Diego, CA. He is a RSI Beta Tester, and Treasurer / Librarian for the Epson Users of San Diego. Rev. Beeman is active as the chief financial officer of Good Ideas Inc., (a corporation for promoting and distributing enterprising products and services). Charlie also teaches Inductive Healing, (a method utilizing oriental healing techniques) and is the chief financial officer of "Shieloh", a non-denominational Church for healing ministries.

Editors Note: We do not recommend this procedure of bringing your spreadsheet into the Editor for the beginner and suggest you read the method used by Dan Oja in this issue (page 32). You enter Zapple at your own risk.

Zapple is used by programmers for making changes to the program. If you try it and get stuck in something you are not sure of, press the RESET button and start over.

This should give you a number of things to try out. Enjoy.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1			Sales	by	Region	in	Millions						
2													
3	Office	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr
4	==========	==========	==========	==========	==========	==========	==========	==========	==========	==========	==========	==========	==========
5													
6	North	$1.75	$2.05	$2.10	$2.29	$2.40	$2.55	2.36	2.42	2.78	2.63	2.78	2.9
7	East	$1.35	$1.89	$2.00	$2.21	$2.50	$2.66	2.75	2.8	2.78	2.82	2.9	2.85
8	South	$1.47	$1.87	$2.02	$2.21	$2.54	$2.64	2.65	2.67	2.78	2.67	2.89	2.76
9	West	$2.20	$2.55	$2.70	$3.10	$3.25	$3.33	23.33	3.45	3.24	3.56	3.45	3.67
10													
11	Total	$6.77	$8.36	$8.82	$9.81	$10.69	$11.18						
12													
13													

Rx FOR YOUR Qx

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PEACHCALC AND MULTIPLAN

by John D. Yoder

SPEC SPOT

Product: Multiplan 1.06
Type: Spreadsheet
Computer: Epson QX-10, QX-16
Operating System: CP/M 2.2, CP/M 2.25, MS-DOS 2.0
Price: $119
Ease of use: fair
Performance: good
Documentation: average
Summary: A powerful spreadsheet that is relatively slow when used with CP/M's limited memory.
Manufacturer:
Microsoft Corporation
10700 Northup Way
Box 97200
Bellevue, WA 98009

SPEC SPOT

Product: PeachCalc
Type: Spreadsheet
Computer: Epson QX-10, QX-16
Operating System: CP/M 2.2, CP/M 2.25, MS-DOS 2.0
Price: with "PT 5000", $395.
Ease of use: Very easy to use
Performance: Excellent
Documentation: Very good
Summary: Though less powerful than Multiplan, it is quite adequate for use at home or in a small business.
Manufacturer:
Peachtree Software
3445 Peachtree Rd. N.E.
8th Floor
Atlanta, GA 30326

Trying to find the perfect spreadsheet is like trying to find the perfect car; you soon discover that such perfection doesn't exist. A model that handles well in traffic turns out to be a snail in the mountains; one that can hold seven passengers, won't fit in your garage.

In cars or spreadsheets, compromise is inevitable. None has all the desirable features. The real basis for picking one is to find the one that has the features you value the most.

Ease of Use

Since most spreadsheets have similar capabilities, the basis for comparing them is somewhat subjective. To me the most important consideration is how easy the spreadsheet is to learn and to use. Is it a good "fit" for my needs and methods of working?

I define "ease of use" to mean how easy it is to enter data, enter and copy formulas, edit, save and retrieve files, format, and get help. In several of these categories Multiplan is superior, but overall PeachCalc is faster and friendlier.

Learning PeachCalc and Multiplan

Learning both PeachCalc and Multiplan is relatively easy. Their manuals and sample lessons take little for granted. They guide you through sample spreadsheets, explaining the commands simply and clearly.

Multiplan's manual is somewhat less accessible, reflecting Multiplan's more numerous functions. Novice spreadsheet users, however, should have no trouble following either manual at the beginning level.

Entering Text and Numbers

Entering text, as opposed to numbers, is easier with Multiplan than with PeachCalc. Once you are in the text entering mode (Alpha), Multiplan stays there until you exit. With PeachCalc you have to enter quote marks (") at the beginning of every cell that contains text. Consequently, if your spreadsheet has a lot of text, you will have to remember to hit the (") at the beginning of every cell.

The two spreadsheets enter numbers in slightly different ways. Both transfer numbers from the command line to the active cell in the spreadsheet by pressing enter or return (see figure 1). Multiplan, however, gives you the additional option of entering numbers or text by hitting the cursor movement keys. The cursor will then move in the direction of the cursor key you hit.

When you enter data or text in the active cell with PeachCalc using the return or enter key, the cursor automatically advances in the direction you last moved the cursor. An arrow at the end of the status line tells you which direction the cursor will move. Auto-advance speeds up entry, if you want to move in the direction the cursor is pointing; it's annoying if you don't. If you aren't watching the screen and the cursor moves in an unexpected direction, you may inadvertently enter data in the wrong cell. You can turn off the next cell-advance feature, but then you must enter data and advance the cursor in separate steps.

Editing Text and Formulas

If you make a mistake entering text or a formula in Multiplan, the editing keystrokes are nonstandard and confusing. For example, control U deletes the character to the left of the cursor, while control V and B move the cursor left and right along the editing line. It's as primitive as editing in BASIC.

PeachCalc, in both its Epson-CP/M and MS-DOS versions, utilizes the standard cursor, insert, and delete keys. The result is much faster editing of text and formulas.

Entering Relative Formulas

The greatest difference between the two programs is in entering formulas that show relative relationships. A relative relationship in a formula is useful when you want formulas in different parts of the sheet to show the same relationship to another cell or cells. For example, you might want columns A to H to show totals in row 5. To speed up the entry of the formulas, you would enter the formula once and then copy it to the other cells in the row.

In Multiplan you make the formula by pointing to the cells you want to total with the cursor. The simple addition of two cells results in the formula, R[-1]C+R[-2]C. That means,

add the cell that is one row above the active cell to the cell that is two rows above the active cell.

Since such a notation is difficult to type accurately from the keyboard, you always end up entering formulas with relative references by pointing to the cells with the cursor. That process that isn't too bad if only a few near-by cells are involved, but it is very slow when cells in the formula are widely separated or off the screen.

Trying to "decode" a Multiplan formula with relative references at a later point in your work, such as when you have an error message because of a circular reference, is a nightmare; it's almost impossible to figure out what cells the formula is referring to.

PeachCalc allows you to create a formula with simple column letters and row numbers, and then make the references to other cells absolute or relative when you copy them to other cells. This feature alone is enough for me to choose PeachCalc over Multiplan.

Analyzing formulas with PeachCalc is much easier. By using its global command, it is possible to quickly change the screen from numbers to formulas. Even slicker is the ability in PeachCalc to split the screen and have numbers for a section of the sheet on one side and the formulas behind the numbers on the other. (See example.) The split screen is a quick way to check on whether your formulas have included the correct cells in arriving at their calculations.

To check the accuracy of formulas in Multiplan, it is necessary either to place the cursor in each cell and read the formula in the command line, or print out the entire spreadsheet using an option in the print menu. I much prefer the nearly instantaneous access to formulas that PeachCalc allows.

The ability to understand formulas is a critical one because a wrong formula can easily invalidate an entire worksheet. I've spent hours trying to unravel a Multiplan formula; I've never had any trouble understanding the straight forward cell identification method PeachCalc uses.

Multiplan has a unique feature for entering absolute references. It allows you to "name" a cell or cells, like "Net Income," and then enter the names in formulas. For example, to find your profit or loss, you would name your income total "income" and your expense total, "expenses." Your formula would simply be "income-expenses."

Saving and Retrieving Files

One area where Multiplan has a definite advantage over PeachCalc is in saving and retrieving files. Anyone who has accidentally deleted an important column of formulas knows how important it is to save spreadsheets frequently.

PeachCalc requires you to enter the name of the file each time you retrieve or save it. Unless I write a file name down, I usually can't remember its name when I want to retrieve it.

Saving the file is easier; I put the file name at the top of the spreadsheet and lock that row so that it doesn't scroll off the screen no matter where I am in the spreadsheet.

With Multiplan you can load the file by pointing to it in the index with the cursor and save it without re-entering the name. This feature prevents you from creating a new file by accidentally mistyping the file name.

A recalculation of 212 cells took: Multiplan 29 seconds (CP/M), (PC-DOS) 15 seconds, and 9 seconds in Valdocs 2.

Other Features

In PeachCalc you can delete and insert only one row or column at time. Multiplan allows you to specify any number of rows or columns to insert or delete, which greatly speeds up that all too frequent task of re-working a spreadsheet to include new data.

Multiplan's help menus are much more complete, its formatting capabilities stronger, and it can support four windows, compared to PeachCalc's two. However, I give the edge in ease of use to PeachCalc because it is faster at building and copying relative formulas and editing text.

Transferring Files

Both programs have the ability to write a file to the disk as an ASCII file, making it possible to incorporate the spreadsheet into a prose document. Both will also transfer file data to graph programs in their families - Multiplan to Microsoft Chart (available only in MS-DOS), and PeachCalc to Business Graphics System, (also available only in MS-DOS).

Size and Speed

Lack of speed is a major problem with Multiplan in its CP/M version, and the MS-DOS version doesn't set any speed records either. A recalculation of 212 cells in Multiplan took 29 seconds. That's slow. In its PC-DOS version Multiplan did the same computation in 15 seconds. A similar recalculation in the CP/M version of PeachCalc took 5 seconds (*and 9 seconds in the Valdocs 2 Spreadsheet*).

Multiplan's slowness in CP/M results from its size. It takes up so much memory that only 12K is left for the spreadsheet. That means slow recalculations and small sheets. A sheet 16 columns wide by 60 columns long filled with data is the largest sheet I can load, despite the fact that the worksheet is theoretically 63 columns by 255 rows. While using a similar spreadsheet in PeachCalc, the memory was only sixty percent full. Though certainly not a huge sheet, it is adequate for most uses. The Peach Calc sheet is theoretically 63 columns by 254 rows and will occupy 26K.

Multiplan overcomes its limited memory to a degree by allowing you to link spreadsheets together. For example, this spring I created a 1040 tax form, then made up four additional sheets corresponding to schedules B, two Cs and a W. Then I made the totals on these sheets transfer to the correct line of the 1040 form, giving me a larger number of cells to work with.

Still, I would prefer the larger capacity per single sheet to that of linked sheets that one must load separately in order to change data. (The Multiplan Home and Office Companion by Elna Tymes and Peter Antoniak lists 30 applications for businesses and 18 for the home that make the most of Multiplan's small sheets.)

Functions

The strength of Multiplan is in its superior array of mathematical functions. It sports 40 functions to PeachCalc's 24. If your work requires complex mathematical calculations, you should check the list in the Multiplan manual.

Most small businesses and homes, however, don't require the sophistication of Multiplan. My guess is that PeachCalc has all the functions the average user needs for business or personal use.

Examples of Spreadsheets

What can a spreadsheet do? In a small business you can use it to

create a balance sheet, budget, do a simple general ledger, analyze cash flow, and figure a break-even point, to mention just a few examples.

The User is the Critical Factor

Ultimately, it is not the capabilities of the spreadsheet, but the ability of the spreadsheet user, that determines how well it solves a mathematical or logical problem. The greatest spreadsheet on earth isn't a substitute for sound logic. An experiment reported in the May 28, 1985 issue of PC magazine illustrates the point.

The editors of PC asked teams of students from the Wharton School of Business to solve three business problems using ten of the most popular spreadsheets, including Multiplan, PeachCalc, and Lotus 1-2-3. They judged the results on how quickly the teams solved the problems, the accuracy their answers, and the appearance of the spreadsheet printout.

In the spreadsheet fraternity, Framework is a lightweight, with only 4 - 5 thousand cells. Lotus has 500,000 and Symphony, 2 million, while Smart Spreadsheet has 10 million. The gigantic sheets proved unwieldy for the novice users who were the contestants in this experiment.

The team using Framework won each part of the contest, not because Framework is necessarily the best spreadsheet, but because its team of three students were the best at analyzing the problems.

PeachCalc was second and third in two of the problems; Multiplan, along with Lotus 1-2-3 and Symphony, didn't place in the top three in any of the problems.

In light of the results the organizers of this "spreadsheet face-off" speculated that, in addition to the human factor being very important in determining the results of their experiment, there may be an inverse relationship between the size of the spreadsheet and its ease of use.

Conclusion

PeachCalc and Multiplan are both excellent spreadsheets. If I were forced to make a choice between them, I would choose PeachCalc. It is faster at doing calculations, and its ability to enter and copy relative formulas is superior. I've learned to live with its awkward way of saving and retrieving files.

In my next article I will detail some examples of how you can track a stock portfolio, create a budget, or track your savings. ■

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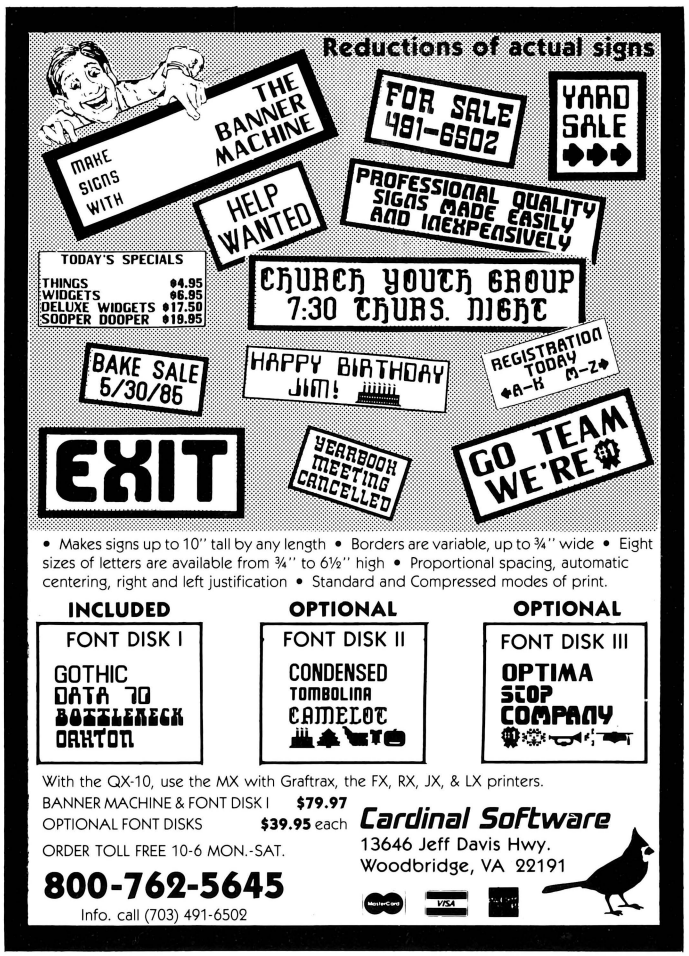

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This month's tape contains the following files:

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MBAS/XR.BAS - Will make a list of the line numbers for variables in BASIC (requires a printer).

These programs require some type of additional RAM memory to function, either the 60K or 120K RAM disk or the Multi Function Unit.

To order the Tape of the Month, please send a check or money order for $10 to the EpsonConnection, Tape Service Department, P.O. Box 14027, Detroit, MI 48214, Please be sure to indicate the tape number you are ordering (TOM-9).

Disclaimer: All of the programs and documentation on this tape are known to be public domain and no warranties are expressed or implied. There are no guarantees with public domain software. All of the programs have been tested on the Geneva PX-8, and are known to run. Public Domain programs are programs written by other users, for public use at little or no charge, other than that for handling, mailing and materials.

Note: We imply no similarity, or advise any comparison, between public domain software and software that is commercially produced. A beginning knowledge of CP/M is also recommended to utilize this software.

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Spreadsheet to Word Processor Valdocs 2.00

by Dan Oja

Transferring a Spreadsheet File to the Editor in Valdocs 2.0

Valdocs 2.00 is an extremely sophisticated integrated program with many capabilities. At first glance however, there seems to be no easy way to transfer spreadsheet information into word processing documents.

I recently discovered a method which allows the transfer of Valdocs 2.00 spreadsheet information directly into Valdocs 2.00 word processing documents. The process is really quite straightforward if you think of it as a variation of the print-to-disk method commonly used to transfer PeachCalc files to Valdocs 1.19.

The usual spreadsheet to word processor transfer method consists of printing the spreadsheet screen display to a disk file, and later retrieving that file into the word processor as a non-indexed document.

The Valdocs 2.00 spreadsheet module does not include a print to disk option. However, the Valdocs 2.00 spreadsheet does offer a feature known as print spooling. The system creates a temporary print file which is stored on the disk. The system then actually prints the sheet from this temporary file rather than from the screen. This allows you to continue to work on the spreadsheet or even move to other modules of the system while the file is being printed. It is important to understand that this print spool file actually exists only during the period of time that the file is being printed, and is then automatically deleted by the system.

Essentially, the process of transferring Valdocs 2.00 spreadsheet files to Valdocs 2.00 word processing documents consists of allowing Valdocs to create a temporary spreadsheet print file, but preventing it from printing (and deleting) the file until we have retrieved a version of the file into the Valdocs 2.00 editor.

The following instructions describe this process in detail.

Creating the Temporary Print File

1. Move the cursor to the point in the Valdocs document where you wish the spreadsheet to appear. Press CALC to enter the spreadsheet program.

2. Create or retrieve the spreadsheet file which you would like to transfer to the editor.

3. Press PRINT to start the print selection process. (The printer must be turned on and be on-line at this time).

4. Select the screen area to be printed. In order to minimize formatting problems, it is advisable to select an area which is narrower than the current width of your Valdocs document. For documents with the default left/right margins using the normal character size, the selected area should be less than 60 characters wide. Wider areas can be transferred to the word processor and made to fit on the screen by selecting condensed print with the SIZE key prior to retrieving the spreadsheet file. This process is explained further, and demonstrated in figure 3.

5. Press PRINT to complete the print selection process.

6. Immediately after pressing PRINT, press the ON-LINE button on the printer. This takes the printer off-line, preventing Valdocs from printing the temporary spreadsheet file. You must take the printer off line before the spreadsheet file starts to print.

Retrieving the Temporary Print File

7. Return to the editor by pressing EDIT (new keyboard) or CTRL-WORD (old keyboard).

8. From the editor, press CTRL-Q (for Quirks menu).

9. Press RETURN to display the TPM III directory.

10. Among the files listed on the screen, there should be one with the name PRSPR000.SP$. This is the name assigned to the first temporary print file that has not yet been printed.

11. To retrieve the file into the editor, press R to select <R>etrieve non-indexed file, enter the name PRSPR000.SP$, and press RETURN. You may use upper or lower case for the name, but you must use three zero's, not the letter O.

12. The file will be retrieved and displayed on the screen at the current cursor location.

13. Press STOP, <2> STOP current document, and turn the printer back online. The system will advance a blank page, and the temporary file PRSPR000.SP$ will be deleted.

14. Delete the line of printer control commands which will be displayed at the beginning of the transferred spreadsheet section.

15. The file may now be edited and saved as a normal Valdocs 2.00 word processing file (see figure 1).

You may print the spreadsheet either with or without borders or rulers. If you print it with borders, they will be retrieved into the Valdocs word processor along with the rest of the spreadsheet file (see figure 2).

It makes no difference if you select compressed or normal print when you print the file from the spreadsheet. When you retrieve the spreadsheet into Valdocs, the file will always appear in normal print. However, if you press the SIZE button to select condensed mode in the editor prior to going to the spreadsheet, it will then be retrieved in condensed mode (see figure 3).

If you already have a document on the screen when you retrieve the spreadsheet file, the spreadsheet will be inserted in the document at the current cursor position. Any text after the current cursor location will be pushed down below the spreadsheet file.

The above procedure allows easy transfer of spreadsheet files into word processing within the Valdocs 2.00 system. However, this procedure can be made even easier through use of a macro, one of the the special features of Valdocs 2.00. Creation and use of a spreadsheet retrieval macro is described below.

Automating Spreadsheet Retrieval with a Macro

If you will be regularly transferring spreadsheet information into word processing documents, it will be worthwhile to create a macro which will automate the retrieval of a stored spreadsheet print file. A macro is a series of keystrokes or commands which are linked to a single command key. Pressing the command key activates the macro which performs the individual actions in sequence. Creation of the appropriate macro will allow you to retrieve spreadsheet files with a single keystroke.

The following instructions describe the procedure for creation of a macro which will automate the spreadsheet retrieval process.

Creating a Spreadsheet Retrieval Macro

1. From the editor, CTRL U (or HELP and <U>).

2. Press RETURN to select <C>urrent Valdocs definitions.

3. This macro may be assigned to any CTRL-number combination from 0-9. To assign the macro to CTRL-9, press the down arrow key to move the cursor down to number 9.

4. Press CTRL-Q. An inverse Q will appear on the macro line. When the macro is activated, this will open the CTRL-Q, Quirks menu.

5. Press r. An r will appear on the macro line. When the macro is used, this will position the cursor on the <R>etrieve non- indexed file option of the <Q>uirks menu.

6. Press RETURN. A curved down arrow will appear on the macro line. This will tell the macro to select the <R>etrieve non-indexed file option.

Figure 1

Samples of Spreadsheets Retrieved into Valdocs 2.0

The following is an example of a Valdocs 2.0 spreadsheet file which was transferred to the word processor using the method outlined in this article. Notice the line of printer control commands (;100 BmF3;CB) which has not been deleted.

```
;100 BmF3;CB
   Month
                    Sales Expenses   Profit % Profit

     Jan          4568.00  3598.00   970.00      21%
     Feb          4879.00  3879.00  1000.00      20%
     Mar          5236.00  4258.00   978.00      19%
     Apr          5368.00  4689.00   679.00      13%
     May          5587.00  4785.00   802.00      14%
```

Figure 2

Sample of Retrieved Spreadsheet with Borders

In this sample the spreadsheet is printed with the borders, and the line of printer commands has been deleted.

```
 :____A___:____B___:____C___:____D___:____E___:____F___:
1:    Month
2:                        Sales Expenses   Profit % Profit
3:
4:      Jan             4568.00  3598.00   970.00      21%
5:      Feb             4879.00  3879.00  1000.00      20%
6:      Mar             5236.00  4258.00   978.00      19%
7:      Apr             5368.00  4689.00   679.00      13%
8:      May             5587.00  4785.00   802.00      14%
```

Figure 3

Retrieving into Condensed Mode

This is an example of putting Valdocs editor into condensed mode prior to retrieving the spreadsheet.

```
Month
                  Sales Expenses  Profit % Profit Prior Yr % Change

     Jan        4568.00  3598.00   970.00    21%   832.00     14%
     Feb        4879.00  3879.00  1000.00    20%   970.00    300%
     Mar        5236.00  4258.00   978.00    19%     0.00     -2%
     Apr        5368.00  4689.00   679.00    13%   978.00    -44%
     May        5587.00  4785.00   802.00    14%   679.00     15%
```

7. Type prspr000.sp$. You may use either upper or lower case, but you must use zeros, not the letter o when you type this file name. When the macro is activated, this will print the name of the temporary spreadsheet print file on the retrieve line.

8. Press RETURN. A curved down arrow will appear on the macro line. This tells the macro to retrieve the file with the name prspr000.sp$.

9. Press the +/- key. An inverse backslash \ will appear on the macro line. This tells the key definition program that the next key you press will be a HASCI key.

10. Press the right delete key. An inverse T will appear on the macro line. When the macro is activated, this will delete the character to the right of the cursor.

11. Press the +/- key. An inverse backslash \ will appear on the macro line. As before, this tells the key definition program that the next key will be a HASCI key.

12. Press the LINE key. An inverse U will appear on the macro line. This tells the macro to delete the line to the right of the cursor. This will delete the line of printer commands which is retrieved with the spreadsheet file.

13. Press the RETURN key. A curved down arrow will appear on the macro line. This will insert a line feed in the document, moving the spreadsheet file down one line to compensate for the line which was removed when we deleted the printer command line.

Storing the Macro

14. Press STORE to store the current macro definitions.

15. Press RETURN to <U>pdate current definitions.

16. Press UNDO to resume editing.

This set of macro definitions will be automatically activated whenever you use this Valdocs 2.00 Run-Time disk.

Using the Macro

To retrieve a spreadsheet with this macro, go to the spreadsheet and perform the print function as explained in the section Creating the Temporary Print File. After retrieving to the editor, you can retrieve the spreadsheet simply by pressing CTRL-9. You must use the number 9 on the numeric keypad, not the number 9 on top of the main keyboard. The spreadsheet will be automatically retrieved, the line of printer control codes will be deleted, and an additional blank line will be inserted to push the spreadsheet down one line. That's about as easy as spreadsheet to word processor transfers can get.

I hope the above procedures work well for you and increase the usefulness of Valdocs 2.00 and your Epson computer system. I also hope that these examples will encourage you to explore and learn to fully utilize the remarkable capabilities of the Valdocs 2.00 system.
Viva Valdocs! ■

Dan Oja is part-owner and General Manager of C.L.A.S.S. Computers in Michigan's Upper Peninsula. Dan spends much of his free time programming in RSI BASIC on his QX-10. He currently has several educational programs under evaluation for possible inclusion in RSI's Independent Programmers Guild. Aside from computers, Dan is very active in the martial arts. He is the Chief Instructor at Marquette Taekwon-Do where he recently earned the rank of 4th Degree Blackbelt.

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A Super-Fast Word Processor:

MSCRIPT

by Steve Stecklow

SPEC SPOT

Program: MSCRIPT
Description: Low-cost, full-featured word processor
Performance: Good
Documentation: Very good
Price: $79.95
Formats: Epson QX-10; IBM PC and compatibles; TRS-80 I, II, III, 4, 12, Zenith Z-100
Operating System: CP/M B (for QX-10)
Summary: A simple, super-fast word processor from the makers of the MTERM commmunications program, but not as easy to use as Valdocs. Its biggest drawback is that it does not take full advantage of the QX-10 keyboard.
Manufacturer:
Micro Systems Software, Inc.
4301-18 Oak Circle
Boca Raton, FL 33431
(800) 327-8724

With little fanfare, Epson America introduced last year a wonderful communications program for the QX-10 called MTERM. Released with CP/M B, the program contained many advanced features found only on expensive communications packages. Moreover, it was easy to use and extremely fast. Fans of MTERM should be interested to know that the company that produced the program for Epson, Micro Systems Software, Inc., also makes a word processor for the QX-10 called MSCRIPT.

Of course, everyone who owns a QX-10 already has a word processor, Valdocs. Despite its ease-of-use, the Valdocs Version 1 editor is extremely slow compared with other writing programs, such as WordStar or Peachtext. During the lengthy wait for Version 2, many Epson owners abandoned Valdocs for other word processors, opting for speed over user friendliness.

MSCRIPT is significantly faster than Valdocs Version One, and even 2.0 on floppy disk-based systems. The program literally takes just a few seconds to store a document, (for example, it takes less than four seconds to store an 1100-word article.) Searching for and replacing text strings is virtually instantaneous.

Although MSCRIPT costs only $79.95, extremely inexpensive for any program these days, it is virtually a full-featured word processor.

With MSCRIPT, you can manipulate blocks of text; merge different documents; delete by character, word, line or block; justify text left, right or center; and insert headers and footers. You can also jump to the top or bottom of a document in lightning speed.

If you are familiar with MTERM, you should have little problem adjusting to MSCRIPT. Like the communications program, MSCRIPT uses a command menu that can be accessed with one keystroke. The menu, which can be retrieved instantantly, allows you, among other things, to store a document, load a new one, clear the editing screen and search for a text string.

The command screen also contains a nifty little scorecard that tells you at a glance exactly how many words you have written; few word processors offer this. It also tells you how much space you have left for the document. MSCRIPT can only handle documents up to 46,000 characters long, but except for books or dissertations, the program should suffice for most writing assignments.

MSCRIPT also has a special print menu that allows you to print out the document on the screen even if you haven't stored it. This menu allows you to control lines per page, justification, margins, page numbers, line spacing and single-page mode. MSCRIPT also has the ability to use boldface, underlining and other typestyles, depending on your printer. Up to 10 special printer codes, such as italics or special symbols (like Greek letters), can be defined.

That, I'm afraid, is the good news. The bad news is that MSCRIPT is not particularly user-friendly.

For starters, this is not a "what you see is what you get" word processor, like Valdocs. For example, if you want to underline a word, you have to insert special formatting commands in the text. The underlining will not appear on screen, despite the graphic capabilities of the QX-10. Formatting commands also are required for many other chores, including centering a line, changing the margins or starting a new page.

By far, my greatest hangup with MSCRIPT, is that in configuring the program for the QX-10, its author's took little effort to take advantage of the HASCI keyboard. The INSERT key, for example, does not work. To insert, you hit the WORD key. The two delete keys act as extra cursor keys while the LINE key and the TAB SET AND RELEASE keys do not work at all. The keys at the top (such as HELP, STORE and MENU) do not perform their described functions, although they can be programmed as macro keys using the CP/M B setup program.

MSCRIPT clearly is not for everybody. But if you are looking for a quick and low-cost word processing alternative to Valdocs and that is simpler to learn than Wordstar or Peachtext, then MSCRIPT may be just what you need.

To execute most of the editing commands in MSCRIPT, you have to hold down the GRPH SHIFT key and strike another key. To delete a character, for example, you hit GRPH SHIFT and D. To mark the beginning or end of a block, you hit GRPH SHIFT B. If you should forget any of these commands, a help screen will pop up if you hit GRPH SHIFT and H.

While moving blocks is much quicker than in Valdocs, other simple editing operations are not. To insert a character in the text, you must hit WORD, type in your insertion and then hit GRPH SHIFT M or the down arrow key to reformat the text. There is no way to delete backwards.

MSCRIPT has a limited UNDO key (GRPH SHIFT Q). When pressed, it will "undo" any changes made to a single line, but no more. If you mistakenly erase a block of text, for example, you cannot retrieve it.

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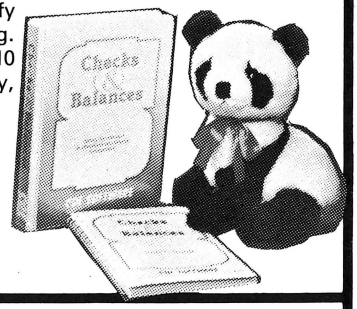

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Unlike versions of MSCRIPT for some other computers, the QX-10 version does not allow you to perform any operating system commands within the program. You cannot even get a directory of the files on the disk without exiting to CP/M. Not only does this set the stage for losing files (if you mistakenly assign a document the same name as one on the disk, you'll erase the first one), but it necessitates a good understanding of CP/M, which some QX-10 owners may not desire learning.

Another criticism of MSCRIPT is the confusing language found on some of its menus. If you want to clear the editing screen, the appropriate command is "Restart MSCRIPT." When you want to exit to CP/M, you select "Exit MSCRIPT TO DOS." To move a block, you must choose "Merge two text blocks." All this in a program that claims it offers "novice friendly operation."

In fairness, however, I must note that once you get the hang of it, MSCRIPT runs beautifully (not to mention, incredibly fast). The short manual, designed for novices, is easy to follow and offers some unusual applications, such as using the program for mailing lists. The program also comes with a handy "Quick Reference Card" that reviews all of MSCRIPT's major commands.

MSCRIPT clearly is not for everybody. But if you are looking for a quick and low-cost word processing alternative to Valdocs and that is simpler to learn than Wordstar or Peachtext, then MSCRIPT may be just what you need. ■

Steve Stecklow is a reporter with The Philadelphia Inquirer and president of the Philadelphia-Area Users group.

"That's the last time I go into a COMPUTER STORE to ask for directions!"

FRIDAY!

by Paul Rothweiler

SPEC SPOT

Product: FRIDAY!
Type: Data base program: Permits 65,000 Records per file, 32 Fields per record. Compatible with dBase II.
Computer: Epson QX-10
Operating System: CP/M 80 2.21 Release or greater. CP/M 86 1.0+, PC-DOS, MS-DOS 1.1+
Required Peripherals: None (Printer needed for hard copy)
Price: $295 (list price)
Ease of Use: Excellent
Performance: Excellent
Documentation: Excellent
Summary: Programmers won't love it, but the average Users will. There are more powerful dBases around, but none easier to use.
Manufacturer:
Ashton-Tate
10150 West Jefferson Blvd.
Culver City, CA 90230

A little-noticed but great program for QX-10 owners is FRIDAY!, a dBase II spinoff devised by Ashton-Tate. While it was spawned by dBase II, the program is as different from its parent as red is from black.

The best thing about FRIDAY! is the worst thing about its parent. Where dBase II is horribly complex---admittedly more of a programmers language than a data base system---FRIDAY! is simple. So simple, in fact, that a rank amateur can use it from the start.

FRIDAY! offers you plain language, easy-to-use menus, from the moment you bring it up on your computer screen. After you've entered the date in the usual dBase II fashion "MM/DD/YY" you get a Menu instead of the dBase II dot prompt (".") and black screen.

The dot prompt of dBase II is supposed to ask you a question: "What do you want to do?" But what it does is make you freeze at your keyboard and wonder what you SHOULD do.

FRIDAY! on the other hand, first asks you which drive contains your system and data files---giving Drive A and Drive B as defaults so all you have to do is hit a return (enter). If you haven't given the system a front door password (FRIDAY! lets you do that if you're security conscious) you're immediately offered another nice surprise. It's a menu that looks like this:

MAIN MENU
A - Enter Data
B - Retrieve Data
C - Other Activities
D - Leave
What do you want to do? [ ]

What could be simpler than to choose from those four Main Menu items?

No matter what letter you type in the box, FRIDAY! will offer you a new menu (just as simple) to lead you by the hand into your first data base. Even if you ignore Ashton-Tate's manual (a commendably simple one, by the way) and its well-drawn tutorial, you can easily find your way to the main FILE MENU, where you can create your first file by simply choosing "A - create" from the choices FRIDAY! gives you on the easy to understand bottom of the screen menu.

Once you've chosen to create a new file, you can name it in no more than ten letters, and then are permitted fifty letters to describe its contents. After that, you have a choice between designing your own basic form for your file or using the one Ashton-Tate has waiting for you---the "FRIDAYFORM." Because it's well-designed and simple, you'll probably wind up using FRIDAYFORM most of the time, even though you may eventually design a few forms for special purposes.

To create the empty fields in your file, you must first name each field in ten letters, (NAME:LAST, TELEPHONE, ADDR:ST, CITY:STATE, or PART:NO, ITEM:COST, etc.,) then answer FRIDAY!'s questions to tag them "Anything" (you can store either letters OR numbers in them), or "Math" (limiting the field to numbers that can be computed by FRIDAY!), Yes/No (only one). You also have to tell FRIDAY! how long to make the field (up to 32 letters).

PROMPTS BETTER THAN "HELP" SCREENS

FRIDAY! has no "Help" screens, but offers something far better, I think. It puts numbered prompts in the upper right-hand corner of the screen, keyed to the reference section of the small loose-leaf bound notebook that holds the manual. Each prompt "tells it like it is," as a well-known sportscaster might say. So if you're stumped, you can check the manual and find the answer quickly and easily. The prompts are numbered from 001-738 and listed exactly in that order.

Since most "Help" screens are at best only temporarily useful, and just take up space on the disk, once you've learned the system fairly well, FRIDAY!'s system seems more efficient since it takes up virtually no disk space and disappears (into your bookcase or file drawer) when not needed.

FRIDAY!'s circular system, by the way, assures you that you can get out quickly---the Main Menu and the "D - Leave" choice are rarely more than a keystroke or two away. It's a fast system to get in and out of, and that's good, for it lets you get to your files and pull out your information when you need it, without unnecessary delay.

Here's a short rundown on your first trip through the system: At the MAIN MENU you choose A to ENTER INFORMATION, A - Create at the FILE MENU to create a file, NAME your file

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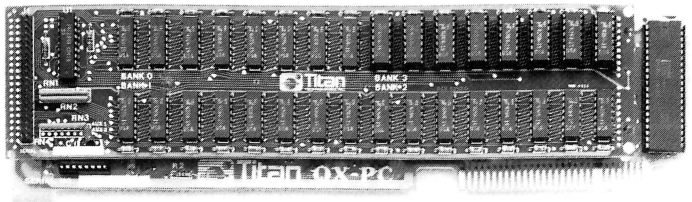

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in ten letters, describe it in fifty, then go to work designing the (up to 32) fields by A - Create(ing) again.

If you've planned in advance the fields you want in your file you'll find you can build a 30-field file in less than a half- hour. Try it on dBase II or another command-driven program. You may be able to do it, but it'll take a lot more than a half-hour unless you're an experienced programmer or a gifted amateur.

Once you've created your file you can start right in entering information if you want to. FRIDAY! needs a minute or two to build your blank form, then offers it up to you and lets you go to work immediately. There's a "ditto" option to speed up data entry, another system plus.

You can store each record as you finish it, so there's little danger of losing data. FRIDAY! is specially configured so you can use the "STORE" key on the QX-10 to do it, as well as the Control W the FRIDAY! system normally calls for.

Two other QX-10 special function keys work in FRIDAY!---UNDO and INSERT. The UNDO key does not bring back deleted text as it does in Valdocs, however. In FRIDAY! it ends all "add information" sessions without saving. So it's not a key to use without thought. The INSERT key works just as it does in Valdocs, toggling the insert mode on and off.

The cursor keys and the right delete key work as they do in Valdocs, but in FRIDAY! the left delete key only moves the cursor to the left without deleting.

RETRIEVING INFORMATION

To bring back the information you want, you simply choose "B - Retrieve" on the MAIN MENU and you get a menu that offers these choices:

```
A  - View/Edit records
B  - Quick Report
C  - Custom Report
D  - Report Lookup
E  - Mailing Labels
P  - Previous Menu
M  - Main Menu
What do you want to do [ ]
```

Again, what could be easier than to make a choice? If you want to browse in your files and make some editing changes, you can do so by selecting A - View/Edit records. FRIDAY! will let you select any individual record for a quick look or will deliver to you any special selection of records that you ask for through the "Retrieval Rules." While they are a bit hair-raising the first time you read them, after a little thought, they can be understood and used easily.

Asking for all records greater than #25 requires the use of the computer symbol > and asking for records greater than or equal to needs both the > and the = sign. The sign (less than) is also used and multiple delivery rules can be set using "and" and "or" as well.

FRIDAY! lets you sort your information according to any of the fields in your file and you can get a QUICK REPORT at the printer or on the screen on any combination of fields. Designing a quick report using the fields you've created or the simple FRIDAY! design takes less than two minutes. Further, you can create the reports and save them for use later as the needs arise.

The C - Other Activities choice on the MAIN MENU gets you to file copying, setting passwords (for every file as well as the front door), and also lets you bring dBase II files you've previously created into FRIDAY! (or the reverse). Like much of this program, it's a good idea.

Designing mailing labels (B - Retrieve Menu) is made very easy by FRIDAY! but with the "CUSTOM REPORTS" FRIDAY!, calls form letters are a bit hairy because you have to enter all text inside quotation marks, line by line, as in Basic programing. Once you get used to it, the reports aren't too bad, but it would be far easier if FRIDAY! let you draw them up in your word processor.

There are some other nice features in FRIDAY! QUICK REPORTS can include sub-totals and totals done by FRIDAY!, so you can get totals on any math field you've included in the report. If you're figuring your income tax and have FRIDAYized your checkbook, you can get figures on all sorts of things---and easily.

Computed fields make it easy to calculate all sorts of things without going into a spread sheet.

Epson owners who need a sophisticated, powerful data base and don't want to have to spend three years reading manuals and sitting in front of a blank screen ought to try it. I did and I love it. You'll say "TGIF!" every time you use it. I do.

Paul R. Rothweiler is the author of 14 published books (the latest of which is Kilroy's War, Avon Books), and is in the process of finishing number 15 using his QX-10. Although new to computing (bought a QX-10 in December '84), Paul has done a number of articles using several different software packages. He is experienced with WordPerfect, Perfect Writer, WordStar 2000, Microsoft Word, and Valdocs 2.

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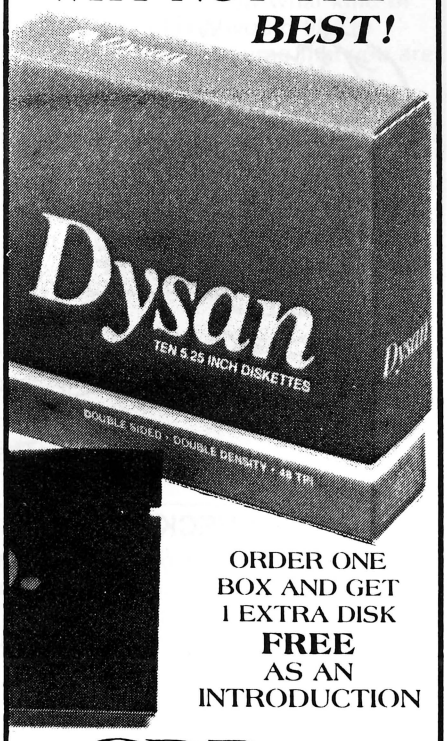

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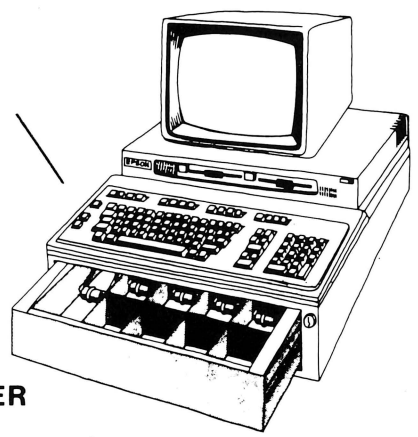

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 Message Menu............<MM>
 User Profile Menu.......<UP>
 Other System Functions...<OF>
 Run Other Program(s)....<RP>
 Exit to DOS.............<ED>
 Expert Mode On..........<EX>
 Goodbye.................<GB>

     Enter your selection: mm
```

by Allen Howell

Welcome to the premier EpConn Upnotes column. This is a new department for our readers who utilize our BBS system. EpConn is short for EpsonConnection, and is part of the new name of our bulletin board system. The new name of our BBS system is "EpConn SOCIS (Subscriber Only Computer Information Service)".

We will use this column to keep you informed about the new public domain software that is available on our system. We will also explain the operation of the BBS and its commands for new users and answer popular questions relating to the BBS.

New Front End Password Function

Effective September 3, 1985, we will be placing a front end password on the EpConn SOCIS. This password prompt will appear immediately after you have connected, and the password that you need to enter will be published in this article. The password will be changed occasionally. Keep in mind that the front end password is just the first door into the system. You will still be required to enter your name and your personal password AFTER you have successfully entered the front end password.

Why are we doing this? The reason is simple: to limit unauthorized access to our BBS. Installing a front end password will allow us to eliminate the local "other" computer users who tend to tie it up.

The Password

The "front end" password beginning, September 3 is: **HASCI**

New BBS Program

If you have not called the EpsonConnection BBS in a while, you will notice that we have placed an entirely new BBS program on-line. This system is the UBBS-II, which was written by yours truly. This new program allows the Sysop to control all areas of the system, and enables the system to expand as desired.

One feature of the new system is the ability to create various (unlimited) message bases, and these message bases may have Co-Sysops assigned to them. A Co-Sysop is any user who has been assigned a specific message base, and all messages entered into the Co-Sysop's message base that are addressed to the SYSOP will be forwarded to the Co-Sysop. The Co-Sysop also has special privilege in his message base, and may read and kill any message. This Co-Sysop concept greatly reduces the workload for the main system Sysop.

If you would like to be a Co-Sysop on our BBS, leave a message to the SYSOP in the TO-SYSOP message base, and let us know what kind of message base you would like to address. We will assume that you are knowledgeable in the area you request, and if no such message base exists, and we feel such a topic could be of interest to our callers, we'll assign it to you. If you are assigned as Co-Sysop to a message base, we ask that you call the system at least once a week to answer any mail that you may have, and that you kill any old messages.

The Uploads:

New Public Domain Software / Updated June 28, 1985

Al's Opinion Scale: ★ = Fair, ★★ = Good, ★★★ = Excellent, ★★★★ = Must Have, ??? = No Comment

Filename	Rating	Size	Description
C2:MCHASE.LBR	★★★★	32K	Maze Chase game written and compiled in "C". A very good game with excellent graphics. Uploaded by John Riddle.
C0:DU-V87.LBR	★★	54K	The latest version of Disk Utility, a popular disk debugging tool.
C0:PATCH18A.LBR	★★★	70K	The latest version of PATCH, a program that allows you to examine memory, files, and disk tracks.
A6:PISTOL.LBR	★★	188K	A derivative of the FORTH programming language.
C0:UPFK11.LBR	★★	22K	Versatile function key program. Uploaded by Alan Gilbertson.
A2:DBL.LBR	★★	10K	Allows text files to be printed on two columns on your printer. Uploaded by Gene Carter.
C0:QX16ZCPR.LBR	★★★	8K	Implement ZCPR on your QX-16.
B5:RBBS42.LBR	★★★	96K	Epson RBBS42 BBS program has been put in the public domain. Please do NOT address Ralph Ruh with questions about it. Other BBS experience is recommended.
A3:ALFRED+.PQC	★★	14K	A better picture of Alfred E. Neuman. Uploaded by Erik Grob.
B4:TUROB3.LBR	???	60K	Turbo Pascal programs uploaded by Mike Russell.

A0:CMOS.MAP	★★	2K	QX-10 CMOS memory map.
MEMORY.MAP	★★	2K	QX-10 Memory map.
SDP.DOC	★★	4K	QX-10 system data page contents. All uploaded by Mike Russell.
A6:PILOT80.LBR	★★	14K	PILOT language interpreter written in MBASIC.
A5:QX16DEMO.RSB	★★	38K	Demo program for the QX-16 uploaded by Tim O'Loughlin.
C2:CHECKTAX.LBR	★★★★	92K	Excellent combination checkbook/tax management program.
A3:LINCOLN.PQC	★★★	6K	Nice picture of President Lincoln.
B5:MBBS30.LBR	★★★	150K	Kim Leavitt's Message Bulletin Board System.
A0:+CATALOG.LQR	★★★★	32K	All of our +CATALOG files in one squeezed library file. Download this, then at your own leisure, you can decide which files you want from this system. If utilized, you should save $$$ on phone bills.
A6:PASCAL.LBR	★★★	334K	No kidding, all of the utilities and documentation files for this version of PASCAL eat up 334k on this system.
B0:TRIVIA.LBR	★★★	56K	Like trivia? This program will allow up to 4 players and knows about 400 trivia questions.
B0:DIMS.LBR	★★★	112K	This is a data base program written in MBASIC.
B5:USERPW37.AQM	★★★	16K	Great for SYSOP's. Allows you to place individual passwords for specific CP/M user areas.
C0:8080EDUC.LBR	★★	32K	Helps teach 8080 assembly language.
B0:BANNER.LBR	★★★	40K	Contains two banner programs. One is in MBASIC, and prints typical banners, the other is a .COM program and prints excellent Old English banners.
A6:COBOL.LBR	★★★	80K	The COBOL language for CP/M computers.
D2:DB-CHECK.LBR	???	64K	A checkbook program written in dBase-II.
C0:EZCPR.LBR	★★	64K	A transient or permanent CP/M CCP replacement.
B0:FMLYTREE.LBR	★	16K	Help you keep track of your family tree.
A6:FORTH-83.LBR	★★★	72K	FORTH language for CP/M computers.
A0:FREESOFT.EQT	★★	24K	A "book" on public domain programs.
B0:GRADEBOK.LBR	★★★	64K	An excellent program for school teachers.
B1:JETSET.LBR	★★★	32K	A flight simulator, and this one works. It's written in MBASIC, and this particular version was written for a KAYPRO computer, and converted for the QX-10 by A. Howell.
C2:KREEP.LBR	★★	120K	A data base program. Set your 7 bit masking to ON before you run this one.
B2:PAYABLE2.BQS	★★★	16K	Pretty decent MBASIC accounts payable program.
A0:RCPM-061.LQT	★★★	48K	A listing of the major RCPM systems in the world.

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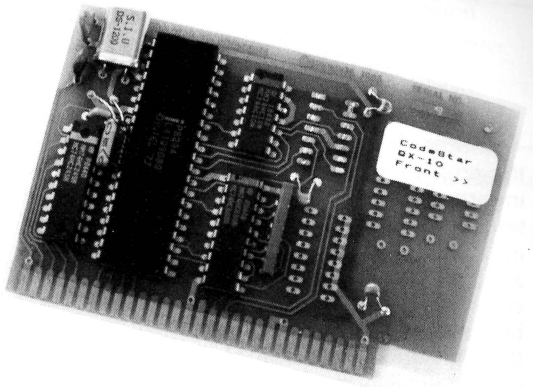

by Allen Howell

SPEC SPOT

Product: Data Encryption System
Type: Hardware/software combination QX-10 or QX-16
Price: $159.00
Ease of use: Excellent
Performance: Good
Documentation: Good
Summary: An easy means for the businessman to make data secure.
Manufacturer:
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If you operate your computer in a business environment where data security is required, Sierra Star Technologies has recently introduced a system for the QX-10 and QX-16 that enables any business owner to fully protect any program and/or data files from unauthorized use. The unit is a small board which is placed into one of the expansion slots of the QX-10 or 16.

Protection is in the form of encryption. In general, encryption is the process of converting humanly legible information into meaningless characters - a form which is totally useless to any individual. To encrypt a document, first an encryption password is chosen. Any series of characters may be used, and the encryptor selects anything he desires for this password. Once a password (or encryption key) has been selected, the process may begin. For each unique password assigned to a document, a different encryption process is used to encode the document. This helps prevent the possibility of the code being broken, and if the code were broken on one document, the same decoding sequence could not be used on other documents. To restore encrypted data files requires the same password which was assigned when the file was first encrypted.

This process, known as Cryptography has been used for centuries by nations to send and receive secret messages between government officials, spies, allies, etc. The receiver of any message had to know the password to decode the information. The CodeStar Data Security System uses the same concept to allow users to protect any computer information, including programs.

The package includes an encryption co-processor board, which is placed in an empty expansion slot on your QX-10 or QX-16. This board contains the encryption / decryption algorithm used by the CodeStar software, and is used with their CODESTAR.COM program. This program works together with the board to code and decode any designated file. To encode a file, you initialize the CODESTAR program. The program will ask for the name of the input file (the file to encode), and then ask for the name of the output file. The output filename must be a name other than the input file name. The program now asks if this is to be a high security document or normal. If high-security, then a password key of up to 255 characters may be used; the normal mode provides for a password of up to 8 characters. CODESTAR then asks if you wish to Encode or Decode the file. After selection of 'E' (Encode), the program asks for the encryption key, which will determine exactly how the document will be scrambled. Once the password is entered, Codestar will proceed to encode your document, however, CodeStar will leave intact the original file, which should be erased once the file has been encrypted. Encryption and decryption speed of the system is moderate. Two other programs accompany the CodeStar package. ERASE.COM will totally eliminate any file, and not just the directory information. The ERA command in CP/M and TPM only erase the directory entry, and leaves the actual file intact on the disk. Since there are many utilities to "unerase" programs, a security break could easily occur. As long as original files are erased with CodeStar's ERASE.COM program, the possibility of anyone unerasing your program is eliminated, since ERASE.COM also destroys the file on the disk.

The other program which is included is called SHOW.COM, which will allow you to view an encrypted file (as long as it was an ASCII file before you scrambled it) on your screen without actually decrypting it.

At the time of this writing, the CodeStar system works on both the QX-10 and QX-16 with CP/M or TPM. An engineer from Sierra Star Tech. confirmed my suspicions that the system will not work with MS-DOS at the present time, but again if there comes a growing demand for it, they could develop MS-DOS software for the co-processor board.

The most unique thing about the CodeStar system is the use of the co-processor board. This board should prove more secure than 100% software based security systems, since these systems can be broken into by using various public domain debugger utilities. A business owner who is always on-the-move can easily remove the co-processor board whenever he is away to provide for extra security, (much like taking the car keys away from his kids when he goes on business trips).

Here are a few of the applications that we feel could benefit from the use of the CodeStar system:

Businesses can protect their payroll data and accounting program data.

Teachers can protect their gradebook data from prevailing computer hackers and students.

Companies can encrypt important documents and send them to their colleagues via Valdocs Mail with little risk of unauthorized data capture.

Another interesting possibility for the co-processor board would be to incorporate it's use with telecommunications. Sierra Star informed us that they could easily adopt many existing public domain communications program and bulletin board systems to transmit data through the co-processor board. If a company wished to setup and maintain a bulletin board program for only a select group of its employees, the BBS system could be equipped with the co-processor board. All systems that wished to communicate with the BBS would then also be required to have the board installed, otherwise, any calling computer would only receive garbage from the BBS system. Such a configuration would prevent unauthorized access, and also prevent the phone company from deciphering the transmission.

If you feel the need for protection from computer related crimes and break-ins, the CodeStar system should fulfill your needs. I would recommend it to anyone who needs a level of security for their computer files. ■

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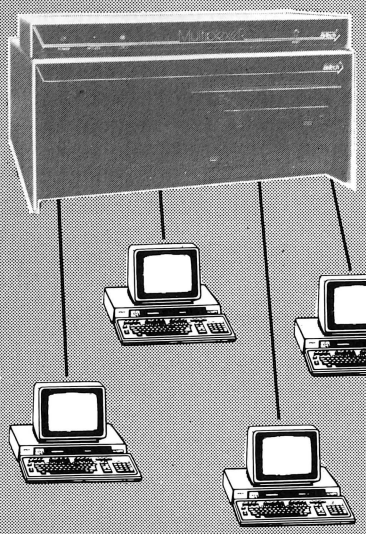

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We encourage all SYSOP's to contact RBBS/RTPM coordinator Ralph Ruh, Lancaster Ohio board, at least once every month to remain up-to-date as new developments arise in the system.

Rx for PX

by Bob Hermann

Load WS in a Hurry

Did you ever exit Portable WordStar and then go right back to it and get a little impatient as it re-loads. Try the following trick to make it reload faster. When at the CPM prompt enter "save 0 g.com". Enter WS and then exit it. Now type "g" <CR> at the prompt. The last program run (which in this case happens to be WS) will still be in memory and will be executed without having to be re-loaded.

ROM Burning

As you have seen in the last couple of issues, we are now offering to burn personalized ROMs for the PX. We now have the capability to create a TWO ROM system, which I think requires an explanation and example. Say you wanted to put PeachCalc in the PX. With the two ROM system this is possible. Working PeachCalc consists of three files PC.COM (24K), PC.HLP (10K) and PC.OVL (13K), for a total of 47K -- too much for a 32K ROM. Use the installation program to install it for a SOROC 120 terminal. If the install program allows, any program being set up for a two ROM system should be configured to look for and write data to the A or D drive. Our two ROM system permits up to 63K of files, so we still have some room left for some utilities. It is convenient to have FILINK and CONFIG available to setup and transfer PC files to the QX. These can fit and there is still room for the ever useful BATTERY and directory program.

With the chips burned and installed in the B and C drives of the PX, if we try to log into drive C we will get a BDOS ERROR -- the computer now does not 'see' drive C, it only recognizes drive B. Doing a directory of the B drive we see that all of the files mentioned above are present. As you see this dual chip capability opens a whole new world to PX owners.

Using DATAPAC

Canadians using DATAPAC to access CompuServe normally can not upload or download programs using XMODEM protocol. Douglas Kitson has overcome this problem using the Geneva Connection script listed below. He indicates that all the lines in the script, especially the WAIT, and DISP lines, seem to be necessary. The script also includes an INPUT FILE which prompts the user for a filespec and then automatically goes to terminal mode so that everything that happens online is captured to disk. To transfer files to or from CompuServe, after specifying XMODEM hit ESC, then at the "*" it is necessary to change the protocol and filename by entering "PROT C" and then at the next "*" typing "INPUT filename". After transfer is complete change back to PROT X, and then INPUT a different filename, followed by two carriage returns.

```
PORT INT
BAUD 300
BITS 7
PARITY E
STOP 1
PROT X
ECHO R
REPLACE 5C 10
SUPPLY LF N
DIAL T ,,NNNNNNN 25 3 ;Replace
"N"s with local Datapac number
SKIP 2
DISP  UNSUCCESSFUL-- NO CARRIER
SKIP 33
DISP  PLEASE WAIT FOR CIS LOG-ON
#TEXT 2E 0D
WAIT 5
DISP
#TEXT 73 65 74 20 32 3A 31 0D
WAIT 5
DISP
#TEXT 70 20 32 39 34 30 30 31 33 38 0D
WAIT 10
DISP
#TEXT 63 69 73 0D
WAIT 10
DISP
#TEXT 10
TEXT PROF 1
#TEXT OD
DISP
WAIT 5
DISP
TEXT SET
126:004,003:000,004:004,001:000
#TEXT 0D
DISP
DISP
#TEXT 0D
WAIT 5
DISP
#TEXT 42 59 45
#TEXT 0D
WAIT 5
DISP
TEXT NNNNN;The first 5 numbers of
your  CIS  ID
#TEXT 2C
TEXT NNNN;The last 4 numbers of
your  CIS  ID
#TEXT 0D
DISP   Enter filename at the following
prompt:
DISP(if record not needed hit <CR>
and at  the  *
DISP       prompt type "TERM" <CR>)
INPUT
END
```

If you are not using a 60 or 120K RAM disk replace INPUT on the next to the last line with TERM, so you won't be making a permanent record of your session. When the program is run you will wait about 45 seconds and then see the prompt for FILENAME followed by the CIS prompt for your PASSWORD.

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commercial software available for the PX-8. Packages designated for imminent release include dBase II, dBTraveler, TeleDex, and TelMerge. Let's take a brief look at some of these packages.

The Geneva version of dBase II will consist of two ROM chips which go in the B and C drives of the computer. There will be a number of differences between it and standard dBase II. First is the addition of a menu to simplify the selection and running of programs. This will make first exposures to dBase friendlier than on any other computer. The experienced dBase user will also notice the absence of several commands -- BROWSE, JOIN, RESET, SORT, and HELP. Except for RESET, other features may be substituted: for JOIN you may use the APPEND FROM command; for SORT use INDEX; the HELP file is gone, but in its place are a handy set of index cards with all the program commands. While using dBase with the PX, the PX's internal clock makes it unnecessary to enter the date; this is not the case with other computers.

What about compatibility of command files (.CMD) and database files (.DBF) on other systems with those on the PX? Naturally, with the commands BROWSE, SORT, JOIN, and RESET gone, any command file with these will have to be modified. Other considerations are obvious, namely the screen differences (only 8 lines) and drive configuration. Any command file referring to a screen line greater than 8 will have no meaning to Portable dBase. Also, since most other computer systems run dBase from drive A with the data on B, it will be necessary to modify command files so that the proper drives are accessed. Portable dBase will have a suggested retail price similar to that of standard dBase, about $450.00 to $500.00.

There will also be a scaled down version of dBase called dBTraveler. It will likewise be a two ROM set with a suggested retail price between $250.00 and $300.00. It will have all the features of Portable dBase except the command file capability. A detailed review of both packages will appear in a future issue.

See the Portable Communications comparison chart in the August issue of the EC for highlights of these two programs.

5 Chips at Once

Doerhoefer Electronics, P.O. Box 34233, Louisville, KY, 40232, offers a modification for the PX-8 that will allow you to have either three or four ROM program chips installed at one time. This modification is done by semi-permanent wiring of the affected ROM chips and adding a switch to the front of the machine in the recessed area where the handle stores, directly under the space bar. You may switch ROM chips by pulling out the carrying handle and using your thumbnail to activate the switch. You do not need to turn the power off to do this. With a Multi Function Unit, it would be possible to have five chips in the PX at once. Cost of the modification is $89.00.

Library Files In this month's tape you will see a program called NULU. This is a library utility which can create, extract, print and otherwise manipulate .LBR files. But what are library files you ask? Simply put, any file takes a minimum of 2K space on the PX, even if its only 500 bytes in length. If you have a collection of small utility programs, you can see that there is the possibility of wasting considerable space. A library file is a collection of files 'crunched' together so that wasted disk space is minimized. This is why you see many library files on bulletin boards; it takes much less time to download the library file than the individual members. Once downloaded, you need a program such as NULU to access the contents of the library. Library files also represent a good way of storing or categorizing files. With the LRUN program, if you put your programs in a library file called COMMAND.LBR, you can type "LRUN -command pip" (if PIP is one of the members of the library) and run PIP just as you normally would. ■

» CP/M User Tip «

By Allen Howell

Have you ever wished for a quick way to get back to a program from CP/M without having to re-load the program from disk? If so, then you may wish to try the following tip. From your CP/M system prompt enter "SAVE 0 RUN.COM". This will create an empty (0 K) COM program. You may call the program anything you wish, such as GO.COM, as long as it has an extension of COM. Now, whenever you enter the name of this empty COM program, CP/M will execute the contents of your QX-10's memory, which will always be whatever the last program loaded into memory was. There are a few programs this will not work with, MBASIC is one of the few.

Traveler's Pak

Appointment Book, Expense Log, and Time Management Software for the Geneva.

by Bob Hermann

SPEC SPOT

Product: Traveler's Pak
Type: Scheduler, Expense & Time Management
Computer: PX-8
Operating System: CP/M
Required Peripherals: None
Price: $139
Ease of Use: Exceptional
Performance: Good
Documentation: Good
Summary: Easy to use programs designed to help the traveling user manage time and money.
Manufacturer: Traveling Software, Inc. (distributed by Epson America, Inc.)

The Traveler's Pak contains three software packages, each on a separate ROM capsule: The Traveling Appointment Manager, The Traveling Time Manager, and The Traveling Expense Manager. These programs, which are also configured for other portable computers, are designed to help the person on the go manage time and money. All three programs have been transmogrified for the PX-8, making use of the computer's function keys, clock, and split screen capability.

Although distributed on ROM capsules, the programs are not write protected, thereby allowing users to place them on either a PF-10 floppy disk or a memory expanded RAM drive. Each program requires at least 4K of additional RAM memory to run effectively.

For all three programs the Geneva's screen is split into a right and left side with different sets of screens being displayed according to the functions desired. Keyboard entry has been assisted by the inclusion of default data in some fields and the ability to carry over information from fields in the previous record by hitting the TAB key. The cursor keys allow you to move from field to field (up-arrow and down-arrow), or from character to character (right and left-arrows). The bottom line of the screen displays the current settings of the function keys, which reflect the user options available at any time in the program. A particular choice is executed by depressing the appropriate function key. Since the overall operation of the programs is similar, we will take an in-depth look at one and briefly explore the capabilities of the others.

The Traveling Appointment Manager (APPMGR)

The PX-8 comes equipped with a scheduler type of program. So why would anyone be interested in spending money for another one? There are several features of Portable Scheduler that can be improved, most notably the use of a 12 hour clock instead of a 24 hour one. Traveling Software has done an admirable job with APPMGR; not only are more features offered, but the program is easier to use than Portable Scheduler.

The program is set up to schedule appointments through the year 1999. The first screen seen upon entering APPMGR displays the current month's (according to the date set in the PX system) calendar on the left screen, and the copyright notice on the left. Asterisks will appear to the left of any days on which appointments have been scheduled. The bottom line of the screen display lists the program options that may be chosen: Appmnt/Report (for PF1/PF6) Month/Year (for PF2/PF7), etc. The cursor will be located to the left of the current date, and may easily be moved with the cursor control keys to any date on the screen.

To view/add/modify the appointments for any day, the cursor is moved to the desired date and PF1 (corresponding to Appmnt) is depressed. The appointments scheduled for that day will appear on the right side of the screen. If there are more than twelve appointments for one day, the next 'page' of the list may be seen by hitting the 'Next' key (PF5). Besides the appointment time, the display will show whether an alarm has been set for that appointment, up to ten characters describing its nature or name, and also if it is to be automatically rescheduled. To add an appointment we depress PF1 (now set to the ADD function) again and the calendar on the left side of the screen is replaced by the appointment update screen. For each appointment we enter: the appointment time, alarm period (length of time preceding appointment that we wish the alarm to go off), the length of the appointment, its name or nature (up to 10 characters), whether or not it is to be automatically rescheduled (if so this may be set to yearly, monthly, weekly, daily, or to simply remind you that it must be manually rescheduled), and up to a 62 character description of the appointment. We hit PF1 again (now set to SAVE), and the appointment is then added to the data file (This addition of information to the data file on a record by record basis would seem to preclude using the microcassette drive to store the data files directly from the program -- it might be possible to do this if the file were updated at the end of each session).

APPMGR does not let you schedule two appointments for the same time, and warns you with a beep if any appointments overlap. There is no limit (other than the computer's memory capacity) to the number of appointments, making the program useable as a "to-do" lister. Information is retained on appointments for seven days past the appointment date. It is then automatically deleted from the data file. This retention period is user definable up to 999 days. A printed summary of appointments for any day or period of days may be obtained in either 40 or 80 column format.

I can see room for improvement in this program in only two areas. First, this is a scheduler program, right? But nowhere on any screen in the

program is the current time displayed. And the only time that you can ascertain the date is when the program starts -- the cursor is then located on the current date.

The second criticism concerns the alarm. The program uses the PX-8 system alarm, necessitating reentry of APPMGR to reset the alarm feature after every alarm sequence. So if you have an alarm set for 10AM and 2PM, after the 10AM one goes off, you must enter the APPMGR program itself, so it can reset the system alarm. Otherwise the 2PM alarm will be missed. It would also be nice to be able to optionally set a continuous alarm, instead of having only the single beep of the system alarm.

EXPMGR and TIMMGR

These programs are based on three-letter, user- definable activity (TIMMGR) and expense (EXPMGR) codes. They require that the user first establish these coding sequences in a manner suitable to individual needs. With these sequences properly developed, the PX can take over an individual's time accounting and expense record keeping activities.

TIMMGR allows professionals who bill for their services by the hour to easily computerize their time accounting. Time expenditures are categorized for each client by the activity codes the user defines, and may also be differentiated as billable or non-billable. The default billing rates established for each type of activity may be altered for individual entries. You may even use the PX's clock to use the computer as a stopwatch to record the time spent on a particular activity; however, when this function is invoked the computer may not be used for anything else. A 60 character description field is included with each entry.

The user may view summaries of time expenditures onscreen, defining the summary by activity, client, or both activity and client for a chosen time period. Hardcopy reports are definable by client and time period, with an invoicing option that places each client's report on a separate page. Printed records may all be deleted simultaneously.

EXPMGR operates in a manner that is very similar to TIMMGR. Here you define not only your expense categories (auto, lodging, meals, etc.), but also the type of fund used for each expense (MasterCard, checkbook, cash, etc.). Expenses may also be entered as billable or non-billable (this could also be used to differentiate tax deductible expenses). Onscreen and hardcopy summaries may be defined by client, expense, or fund type.

The key to using TIMMGR and EXPMGR is in the activity/expense codes that the user defines. Codes may, of course, be added or deleted at the user's discretion, with no limit to the number of entries other than memory capacity. Both programs have a 'Find' option, which is somewhat of a misnomer. This feature allows you to 'find' a particular entry, and to view, edit or delete, by paging through all the entries in the data files. This procedure makes 'finding' a particular entry in a large data file rather time consuming.

The documentation is quite easy to digest. The software is so effortless to operate that there should be no need to lug around the manual. For the price, if you have use for two or three of the programs, you will not go wrong with these. They probably don't represent the best software of this type that could be developed for the PX. This is because these programs were NOT developed for the PX, but were rather transmogrified from versions for other portables. Don't misunderstand; they make excellent use of the screen and function keys, but most of the criticisms cited are a result of the programs being transformed for use on the PX, instead of being developed specifically for it. ■

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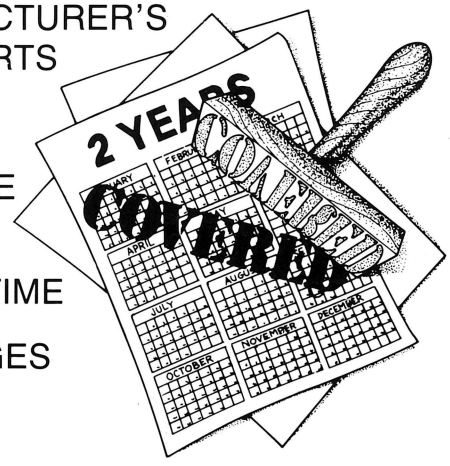

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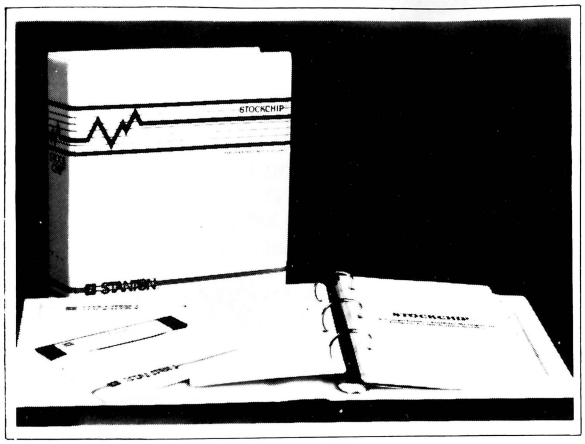

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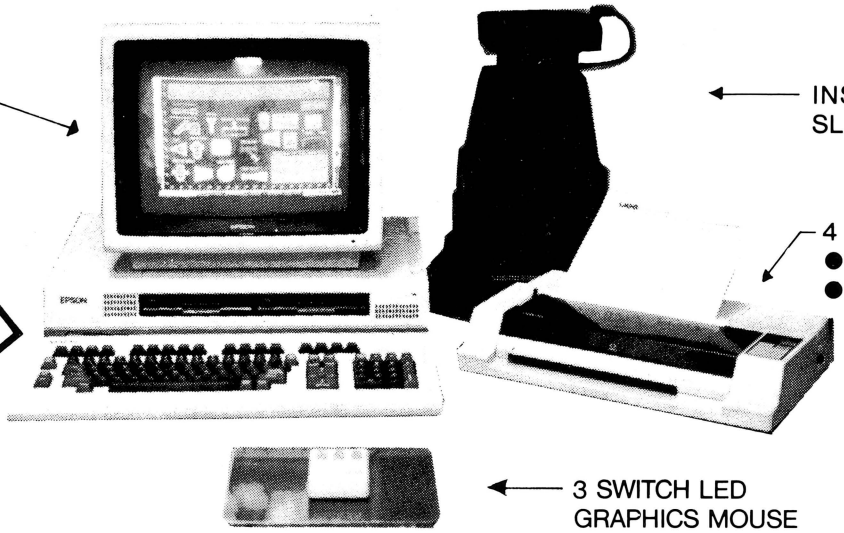

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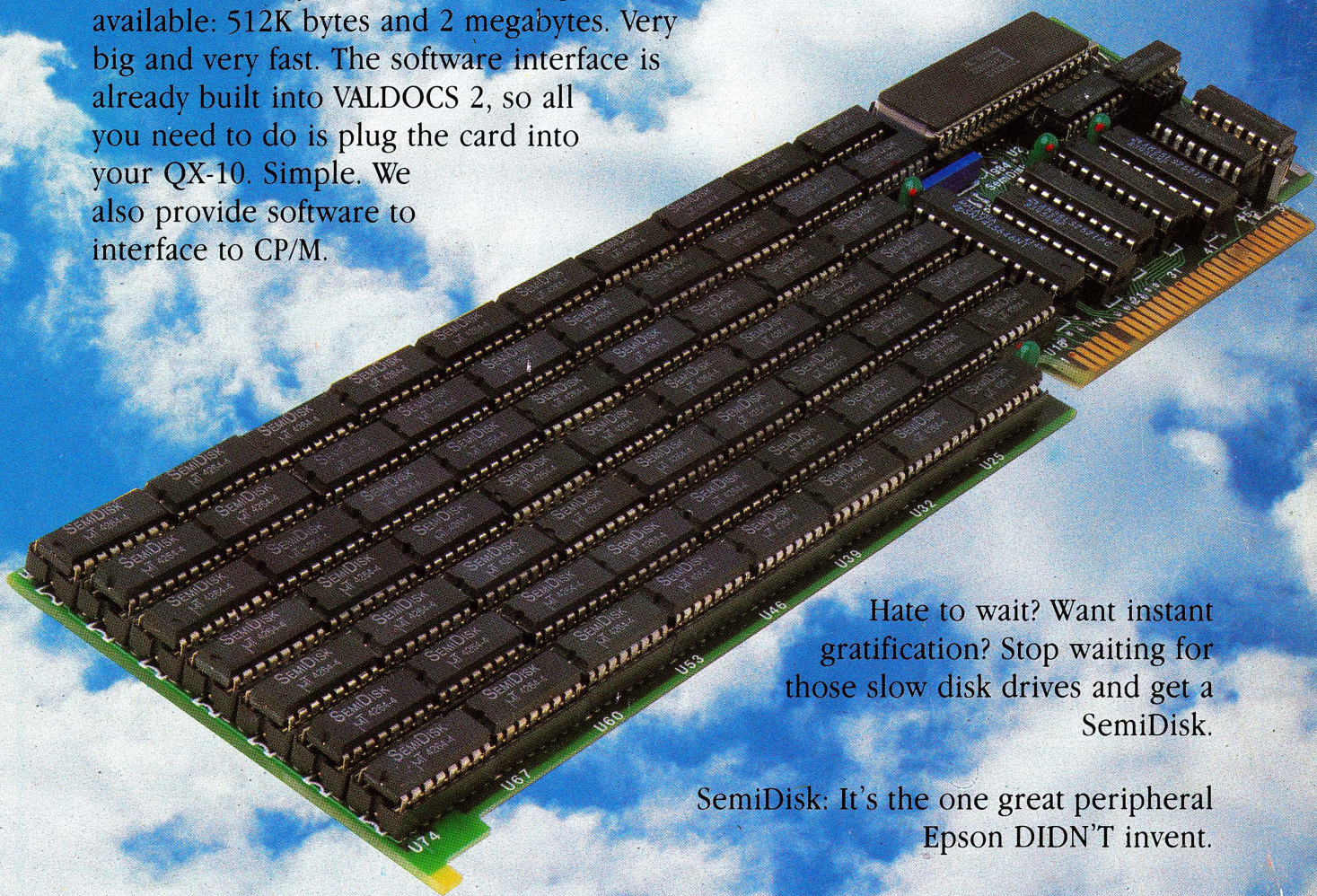

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